

TRANSPORTATION NETWORK COMPANIES AND THE RIDESOURCING INDUSTRY

A Review of Impacts and Emerging Regulatory Frameworks for Uber



October 2015

Prepared for:
City of Vancouver

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Disclaimer

This report was produced as part of the Greenest City Scholars (GCS) Program, a partnership between the City of Vancouver and The University of British Columbia (UBC) in support of the Greenest City 2020 Action Plan. The GCS research project was conducted under the mentorship of City staff members, Paul Krueger and Paul Storer, in the Transportation 2040 Plan Team (Engineering Services).

The opinions and recommendations in this report, and any errors, are those of the author, and do not necessarily reflect the views of the City of Vancouver, The University of British Columbia, the UBC Sustainability Initiative, and/or the UBC School of Community and Regional Planning.

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Acknowledgements

I would like to thank my City of Vancouver mentors, Paul Krueger and Paul Storer, for their ongoing guidance and support in completing this research. I came into this project with virtually no knowledge of the taxi industry and Uber, and with their support, came out with a new set of knowledge, skills, and appreciation for the complexities of transportation policy-making.

Thank you to my colleagues, Thor Kuhlmann, Andreea Toma, and Leslie Ng, who provided valuable support and assistance in completing the project. Mark DeSanti provided access to the City's 3-1-1 data.

I would also like to thank Carolyn Bauer (Vancouver Taxi Association) and staff from Yellow Cab for generously offering their time to provide an inside look at the Yellow Cab dispatch office. Lastly, Dr. Alex Bigazzi from the UBC Department of Civil Engineering and School of Community and Regional Planning provided feedback on the development of the report's financial analysis section.

Report Abstract

New technological innovations in the passenger transportation industry in the form of “ridesourcing services” (colloquially known as “ridesharing”) are disrupting and transforming the taxi industry. The legality of these new ridesourcing services has been challenged by jurisdictions across the world. Governments have begun reform of existing vehicle for hire regulations, creating a new “transportation network companies” regulatory category for ridesourcing services. Commissioned by the City of Vancouver, this study has five research objectives: 1) review existing research and literature on ridesourcing; 2) review the impacts of ridesourcing, particularly on the taxi industry; 3) review the legislative and regulatory responses to ridesourcing; 4) identify potential regulatory frameworks for the City to consider; and 5) provide strategic recommendations and considerations for the City in developing a regulatory framework. The study provides a comprehensive foundation to inform future work on vehicle for hire regulations in the City of Vancouver.

About the Author

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October 2015

Public Report

Prepared for:

City of Vancouver

Transportation 2040 Plan Team, Engineering Services
Sustainability Group, Office of the City Manager
Licenses & Animal Control Division, Community Services

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LIST OF ACRONYMS

BC	British Columbia
CoV	City of Vancouver
CMT	Corporate Management Team
DDC	Digital Dispatch Company
GCAP	Greenest City Action Plan
GCS	Greenest City Scholar(s)
ICBC	Insurance Corporation of British Columbia
NYC	New York City
PTB	BC Passenger Transportation Board
RTIF	Ridesourcing Transportation Impact Fund
SC	Strategic Consideration
SR	Strategic Recommendation
TNC	Transportation Network Company
TNP	Transportation Network Provider
VTA	Vancouver Taxi Association
VTR	Vancouver Taxi Roundtable
UBC	The University of British Columbia
ZCTA	ZIP Code Tabulation Area

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY INFOGRAPHIC

GETTING A RIDE WITH UBER: WHAT DOES IT MEAN FOR YOUR CITY?

New technological innovations in the passenger transportation industry in the form of “ridesourcing services” (also known as “ridesharing”) are disrupting and transforming the taxi industry. Companies such as Uber, Lyft, and Sidecar offer a smartphone app where riders can connect with available drivers in their area using their phone’s GPS and get a for-hire ride to their destination.

Using available research and data, this study reviews all the documented impacts of Uber, and how governments in North America are developing new approaches to regulate the emerging and controversial ridesourcing/ridesharing industry.

WHO USES UBER?

- UBER IS MOST POPULAR AMONG YOUNG ADULTS AGED 18 TO 34 YEARS OLD.



- THE MAJORITY OF PEOPLE IN A SURVEY OF MAJOR CANADIAN CITIES BELIEVE UBER SHOULD BE REGULATED LIKE TAXIS.



WHAT ARE THE IMPACTS OF UBER?

- **TAXI INDUSTRY:** 10-40% REDUCTION IN TAXI MARKET SHARE, WITH COMMENSURATE LOSS IN MEDALLION/LICENSE VALUE.



- **SERVICE:** UNDERSERVED AREAS AND POPULATIONS HAVE SEEN IMPROVED TRANSPORTATION OPTIONS. IN CHICAGO AND NEW YORK, THE NUMBER OF TAXI COMPLAINTS HAVE DECREASED DUE TO IMPROVED SERVICE IN RESPONSE TO INCREASED COMPETITION FROM UBER.



- **ENVIRONMENT:** INCONCLUSIVE EVIDENCE ON WHETHER THERE IS A POSITIVE OR NEGATIVE NET IMPACT, AS MEASURED BY VEHICLE KILOMETRES TRAVELLED (VKT), CONGESTION, AND GREENHOUSE GAS EMISSIONS.



WHAT CAN GOVERNMENTS DO?

- **GENERAL:** GOVERNMENTS HAVE CREATED A NEW REGULATORY CATEGORY CALLED THE “TRANSPORTATION NETWORK COMPANY,” DISTINCT FROM TAXICAB & LIMOUSINE SERVICES.



- **SAFETY:** ADDITIONAL MUNICIPAL BACKGROUND CHECKS AND LICENSES (COLUMBUS, OH), CLOSED-CIRCUIT CAMERAS (WATERLOO, ON).



- **DRIVER TRAINING:** MANDATORY TRAINING PROGRAMS AND DRIVER EXAM (SEATTLE, WA).



- **WHEELCHAIR ACCESSIBLE SERVICE:** 24/7 REQUIRED SERVICE, PERFORMANCE STANDARDS FOR RESPONSE TIME, PROHIBITION OF SURGE PRICING, EMPLOYMENT OF PERSONS WITH DISABILITIES IN THE INDUSTRY (PORTLAND, OR).



- **ENVIRONMENT:** VEHICLE & MODEL YEAR STANDARDS (NEW YORK CITY, NY), FUEL EFFICIENCY STANDARDS, DATA REPORTING.



- **DATA SHARING:** PROVISION OF ANONYMIZED TRIP-LEVEL DATA, INCLUDING LOCATION OF PICK-UP AND DROP-OFF, DISTANCE TRAVELLED, AND DURATION OF TRIP IN ORDER TO SUPPORT TRANSPORTATION PLANNING (BOSTON, MA)



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This infographic summarizes the results of a study that was commissioned as part of the Greenest City Scholars Program, a partnership between the City of Vancouver and The University of British Columbia (UBC). All information presented here is sourced from the study’s final report, *Transportation Network Companies and the Ridesourcing Industry: A Review of Impacts and Emerging Regulatory Frameworks for Uber*. Icons are provided by Freepik.



EXECUTIVE SUMMARY

1.0 INTRODUCTION

Taxis are an important part of Vancouver’s transportation system for both residents and visitors. By providing a flexible alternative when walking, cycling, and public transit are not options, they help to fill a gap and reduce dependency on the private automobile. In Vancouver and most North American jurisdictions, the taxi industry has historically been highly regulated.

However, new technological innovations in the form of ridesourcing services are disrupting and transforming the taxi industry, which is prompting a reconsideration of existing taxi regulations. Ridesourcing is a form of shared mobility that provides on-demand vehicle for hire services, where passengers “source” rides through a mobile smartphone-based app from a pool of private passenger vehicles. These vehicles are typically driven by non-professional drivers who use their own personal vehicles for ridesourcing activities. Colloquially known as “ridesharing,” the legality of these new services has been challenged by jurisdictions across the world. Uber is the largest and fastest growing company in the emerging ridesourcing industry within the larger new sharing economy. For jurisdictions that successfully regulate Uber, the most popular approach has been to create a regulatory category that is distinct from taxis called the “transportation network company” (TNC).

In October 2014, Vancouver City Council passed the motion, “City Action to Ensure Innovative, Increased Taxi Service” requesting staff to study the issue of ridesourcing. This report represents the City’s first dedicated work specifically on ridesourcing services, and will provide a foundation to inform future work conducted by City staff and future decisions by City Council.

2.0 METHODOLOGY

The objectives of the research are to:

1. Review the existing scholarly, legal, and grey literature on ridesourcing and Uber;
2. Review the impacts of ridesourcing and Uber in North American jurisdictions, particularly in relation to the taxi industry;
3. Review the legislative and regulatory responses to ridesourcing and Uber based on peer North American jurisdictions;
4. Identify potential regulatory frameworks for the City of Vancouver to consider; and
5. Provide strategic recommendations and considerations for the City of Vancouver in developing a regulatory framework for ridesourcing.

Table 1. Comparison between Uber and taxi regulations.

Regulation	Uber’s Unregulated Model	Taxi’s Regulated Model
Supply	<ul style="list-style-type: none"> • Unregulated number of vehicles. 	<ul style="list-style-type: none"> • Regulated number of vehicles, i.e., cap
Fares	<ul style="list-style-type: none"> • Unregulated minimum or maximum fare. • Surge pricing (increased fares) during periods of high demand. 	<ul style="list-style-type: none"> • Consistent fares 24/7.
Safety	<ul style="list-style-type: none"> • Self-conducted vehicle and driver safety checks. • In-house training. • No Chauffeur’s Permit required. 	<ul style="list-style-type: none"> • Conducted by objective third-party. • Training by BC Justice Institute. • Chauffeur’s Permit required.
Liability	<ul style="list-style-type: none"> • Drivers’ personal insurance coverage coupled with blanket liability policy. 	<ul style="list-style-type: none"> • Commercial vehicle insurance from ICBC.
Licensing	<ul style="list-style-type: none"> • Class 5 Driver’s License (non-commercial use). 	<ul style="list-style-type: none"> • Class 1, 2, or 4 (commercial use).

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Four primary research methods were employed: a literature review; policy review and analysis; key informant meetings; and 3-1-1 case analysis.

3.0 BACKGROUND AND CONTEXT

In British Columbia, the role of regulating taxis is shared between the provincial government and local governments. The Province of BC regulates taxis through the BC Passenger Transportation Board (PTB). The City of Vancouver has additional authority under The Vancouver Charter through the Vehicles for Hire Bylaw to regulate taxis. Approval from both authorities under the concurrent taxicab regime is required before a taxi is legally allowed to operate and provide passenger transportation service.

In essence, the main role of the PTB is the regulation of the number of taxi licenses and basic regulations over vehicles, while the City of Vancouver's role is the additional regulation of service quality for both drivers and vehicles. The PTB sets basic requirements for taxis, including requirements for licenses, safety, service, and green technology. The City sets requirements for vehicle age and condition, driver licensing and identification, and vehicle inspections.

Ridesourcing services fall within the scope of vehicle for hire and would have to meet these requirements (see TABLE 1).

4.0 REVIEW OF UBER IN VANCOUVER

Uber briefly operated in Vancouver from May to November 2012. However, the PTB eventually informed Uber that their service was classified as a limousine service. The company eventually withdrew from the Vancouver market. The Province stated they would ensure any company that provides a taxi-like service is properly licensed, and indicated they would pursue legal action if Uber operated in BC without the proper licenses.

Since Uber retreated from Vancouver, Uber has launched a public campaign urging the provincial government and the City of Vancouver to allow them to operate. Uber is expected to make another entry attempt into the Vancouver market. TABLE 2 shows estimated fare prices.

5.0 REVIEW OF PUBLIC OPINION

Based on market research in other Canadian jurisdictions, overall, Uber finds the most support in larger jurisdictions where Uber has already established itself. Support is highest among younger people from 18 to 34 years old, and those 35 to 49 years old. Respondents generally agree that Uber should be regulated and operating with the same regulations as taxis. It is predicted that Uber has a moderate to potentially high support among Vancouver residents.

Table 2. Estimated fare comparison between taxi and Uber services in Vancouver.

Service	Base Fare	Per Kilometre	Per Minute	Total Fare
uberX	\$2.50	\$0.80	\$0.18	\$11.18
Taxi	\$3.20	\$1.84	\$0.55	\$15.61
uberXL	\$2.50	\$1.55	\$0.35	\$19.34
UberBLACK	\$8.00	\$2.70	\$0.50	\$29.36
UberSUV	\$15.00	\$2.80	\$0.60	\$37.64

Note: Fare is calculated for a single 6.8 kilometre trip using 12 minutes driving time and 6 minutes idling time, representing a typical short city trip in Vancouver (e.g., from Canada Place to Oakridge Centre).

6.0 REVIEW OF IMPACTS

The following impacts are based on the limited available research and data.

Taxi Industry: Ridesourcing has an overall negative economic impact on the taxi industry as it shares a similar market demand as taxis. The growth of Uber has primarily originated from the substitution of taxi trips and some induced demand. Overall, there has been a 10% to 40% reported reduction in taxi market share, with a commensurate loss in medallion/license value.

Service: Uber generally provides better service compared to traditional taxi companies with faster wait times, lower fares, better passenger experience, and wider service coverage for underserved populations and areas. One study found that the quality of taxi service (as measured by the number and type of complaints) improved due to competition from Uber. That being said, there are concerns regarding the ability for Uber to provide wheelchair accessible service.

Environment: There is inconclusive evidence demonstrating whether ridesourcing has an overall positive or negative environmental impact as measured by vehicle kilometres travelled (VKT), traffic congestion, and greenhouse gas emissions.

Public Transportation: Uber may be complementary with transit, supporting complete first and last mile trips. However, it should also be noted that research suggests that taxis are complementary to transit as well.

Driving Behaviour: Uber has a positive impact in reducing the number of incidents of driving under the influence. However, Uber may also have a negative effect of increasing the risk of distracted driving.

7.0 REVIEW OF REGULATIONS AND POLICIES

The following represents key issues the City of Vancouver and other jurisdictions should consider when developing a regulatory framework for ridesourcing.

Safety: Regulations for driver safety for ridesourcing companies are generally similar to those required for taxi companies. However, Uber has been insistent that their drivers go through the company's own third-party electronic background check in contrast to obtaining a background check at the local police station. In the City of Columbus, OH, drivers are required to obtain a P2P Transportation Network Drivers license and complete an additional fingerprint background check at the City's licensing office. In the Region of Waterloo, ON, the Region has proposed that Uber vehicles must have closed-circuit cameras and GPS tracking installed, and require drivers to take sexual assault prevention training.

Driver Training: Regulations for driver training programs for ridesourcing companies are generally similar to those required for taxi companies. In the City of Seattle, WA, ridesourcing companies are required to administer driver training programs, and drivers must take an exam.

Accessibility: Uber's business model inherently makes it difficult to ensure accessible vehicles are available to accommodate seniors or persons with disabilities. One significant concern from regulators and the disability community is that Uber's economic impact may undermine the taxi industry's business viability, and in turn produce a shortage of accessible taxi vehicles. Uber's typical strategy has been to use their UberACCESS/uberWAV or uberASSIST platform to serve the disabled community, where Uber partners with a wheelchair accessible transportation provider or provides additional training for drivers that allow them assist members of the senior and disability communities.

The City of Portland, OR requires that all TNCs and taxis must provide accessible service 24/7. The City has also established performance standards for wheelchair accessible service, requiring that the average response time for accessible service requests must meet a certain baseline (e.g., a certain number of minutes or less) 95% of the time.

Environment: Potential policies jurisdictions can use to address the environmental impacts of ridesourcing include implementing: vehicle, model year, or engine year restrictions; minimum fuel efficiency standards;

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general anti-idling requirements; and data reporting and sharing requirements for monitoring and evaluation. In New York City, NY, the Taxi and Limousine Commission requires all Uber vehicles to be a model year of 2011 or newer.

Data Sharing: Uber has agreed to enter into data sharing agreements with jurisdictions to support policy and planning. In the City of Boston, MA, Uber is providing authorities with anonymized trip-level data by ZIP Code Tabulation Area (ZCTA) and includes: the ZCTA in which trip began (pick-up); ZCTA in which trip ended (drop-off); distance traveled during trip, and duration of trip.

Insurance: In Canada, Uber claims that drivers are backed by \$5 million of contingent auto liability insurance covering bodily injury and property damage across all service periods. In other words, if the driver's personal insurance would deny a claim, Uber's contingent insurance would drop down to cover the claim. Personal insurance policies typically do not cover commercial activity. However, the insurance industry is beginning to create new insurance products to cover ridesourcing/ridesharing.

Transit Integration: Some jurisdictions have partnered with Uber to integrate Uber's ridesourcing service into their transportation services. Transportation agencies partner with Uber in an effort to provide an integrated multi-modal transportation solution, and assist passengers to complete first and last mile trips. The City of Rockford, IL has considered pursuing a publicly funded partnership with Uber and direct money to fill in after-hour gaps or transport riders to places with poor bus service on Uber's platform.

8.0 POLICY ANALYSIS AND OPTIONS

In sum, the City of Vancouver has four policy approaches it can consider:

- **Option 1:** Do Nothing;
- **Option 2:** Permit Entry with Existing "Taxicab" Category;
- **Option 3:** Permit Entry with New "Transportation

- **Option 4:** Permit Entry with Modified Vehicle for Hire Category.

Each policy option was analyzed using a SWOT analysis, and are accompanied with a list of example jurisdictions, example practices, and strategic considerations. The report does not make a recommendation on which policy option the City should pursue.

9.0 PROPOSAL: RIDESOURCING TRANSPORTATION IMPACT FUND

Securing transportation funding has been an ongoing topic of discussion and political issue in the Vancouver region. However, there has not been a comprehensive examination of the potential that the new ridesourcing industry can offer to the transportation funding formula. There is an opportunity for the City to look towards ridesourcing as a new potential source.

A few jurisdictions in North America have required ridesourcing companies to contribute money towards a fund. Revenue is typically collected through a percentage of gross receipt per trip or a set rate per trip. The fund could support general transportation improvements, the taxi industry, and/or providing wheelchair accessible service. Jurisdictions that have implemented or considered such a fund include:

- **City of Seattle, WA:** Wheelchair Accessible Services Fund;
- **City of Chicago, IL:** Accessibility Fund;
- **District of Columbia, US:** Public Vehicles-for-Hire Consumer Service Fund;
- **City of Portland, OR:** Accessible Transportation Fund; and
- **Mexico City, Mexico:** Fund for Taxis, Mobility and Pedestrians.

Estimated annual revenue generated in Vancouver could range from \$54,000 to \$162,000 on the lower end, and \$243,000 to \$731,000 on the higher end. These estimates do not take into account the potential lost revenue the City collects from taxi companies.

10.0 STRATEGIC RECOMMENDATIONS AND CONSIDERATIONS

Based on the findings of the report, a number of strategic recommendations (SR) are proposed:

- SR1** Conduct a broad consultation process with the public and industry stakeholders, including the accessibility community, to determine their views on ridesourcing.
- SR2** Continue the Vehicle for Hire Dialogues with Uber's continued involvement as a stakeholder.
- SR3** Continue to monitor the ridesourcing industry, including ongoing events and emerging regulations in other jurisdictions.
- SR4** Consult and collaborate with the Passenger Transportation Board to develop a harmonized regulatory regime for ridesourcing.
- SR5** Consult and collaborate with other Metro Vancouver member municipalities to develop a regional approach to ridesourcing.
- SR6** Implement ridesourcing regulations under a pilot program in order to monitor and evaluate the effectiveness of any proposed regulation.
- SR7** Implement a Ridesourcing Transportation Impact Fund to mitigate the impacts of ridesourcing, and to diversify the City's transportation revenue sources.

The City should also take into account strategic considerations (SC) when developing regulation:

- SR1** Uber has indicated preferences for the type of ridesourcing regulations.
- SR2** Uber has indicated preferences for their data sharing agreements.
- SR3** Uber has indicated they will likely set their fares to be competitive with Car2Go in Vancouver.

1.0 INTRODUCTION

1.1 PROJECT BACKGROUND

Taxis are an important part of Vancouver’s transportation system for both residents and visitors. By providing a flexible alternative when walking, cycling, and public transit are not options, they help to fill a gap and reduce dependency on the private automobile. In Vancouver and most North American jurisdictions, the taxi industry has historically been highly regulated in order to protect consumers, and to ensure a competitive balance between supply and demand.

However, new technological innovations in the form of ridesourcing services are disrupting and transforming the taxi industry, which is prompting a reconsideration of existing taxi regulations. Ridesourcing is a form of shared mobility that provides on-demand vehicle for hire services, where passengers “source” rides through a mobile smartphone-based app from a pool of private passenger vehicles. These vehicles are typically driven by non-professional drivers who use their own personal vehicles for ridesourcing activities. Colloquially known as “ridesharing,” the legality of these new transportation services has been challenged by jurisdictions across the world. Regulators, including local governments, have struggled to respond appropriately.^[1] The taxi industry as a whole has heavily criticized ridesourcing companies for introducing unfair competition and violating longstanding regulations. For jurisdictions that regulate Uber, the most popular regulatory approach has been to create a regulatory category that is distinct from taxis called the “transportation network company” (TNC).

Uber Technologies Inc., based in San Francisco, USA, is the largest and fastest growing company in the emerging ridesourcing industry within the larger new sharing economy. Uber describes itself as a technology software company connecting drivers and passengers together, and not a transportation company. In 2012,

[1] Jergler, D. (2014, June 27). “Uber, Lyft, Sidecar toe-to-toe with insurers state-by-state.” *Insurance Journal*. Retrieved from: <http://www.insurancejournal.com/news-national/2014/06/27/332942.htm>; MacMillan, D. (2015, January 29). “Uber laws: A primer on ridesharing regulations.” *Wall Street Journal*. Retrieved from: <http://blogs.wsj.com/digits/2015/01/29/uber-laws-a-primer-on-ridesharing-regulations>

Uber briefly operated in the Vancouver region. However, Uber withdrew their services when the BC Passenger Transportation Board, a provincial tribunal that regulates vehicle for hire services, required Uber to apply for a limousine license.

Uber has since mounted a public relations campaign that has garnered the support of over 40,000 public signatures calling for the provincial government and the City of Vancouver to permit Uber to operate in Vancouver. Uber is expected to re-enter the Vancouver market sometime in the future.

In response to Uber and other events affecting the Vancouver taxi industry in recent years, Vancouver City Council passed a motion, “City Action to Ensure Innovative, Increased Taxi Service” in October 2014. As part of the motion, Council requested City staff to study the issue of ridesourcing/ridesharing, and to identify measures to ensure customers achieve the full benefits of ridesourcing/ridesharing without undermining the existing taxi industry’s standards.

This Greenest City Scholars (GCS) research project specifically responds to Council’s motion on studying the issue of ridesourcing/ridesharing, and contributes to the ongoing and broader staff review of the City’s Vehicle for Hire Bylaw. The research focuses specifically on Uber when possible. The report represents the City’s first dedicated work specifically on ridesourcing/ridesharing services, and will provide a comprehensive foundation to inform future work conducted by City staff and future decisions by City Council.

Specifically, the objectives of the GCS research project are to:

1. Review the existing scholarly, legal, and grey literature on ridesourcing;
2. Review the impacts of ridesourcing in North American jurisdictions, particularly on the taxi industry;
3. Review the legislative and regulatory responses to ridesourcing services based on peer North American jurisdictions;
4. Identify potential regulatory frameworks and

policy options for the City of Vancouver to consider; and

5. Provide specific recommendations and strategic considerations for the City of Vancouver if they choose to develop a regulatory framework for ridesourcing.

1.2 REPORT BACKGROUND

This report was prepared for the City of Vancouver and relevant departments at the City currently conducting work on ridesourcing/ridesharing. This includes:

- Transportation 2040 Plan Team;
- Sustainability Group; and
- Licenses & Animal Control Division.

In addition to the City of Vancouver, the report will be of interest to the following stakeholders:

- BC Passenger Transportation Branch;
- BC Passenger Transportation Board (PTB);
- Vancouver Taxi Association (VTA);
- Vancouver Taxi Roundtable (VTR);
- Uber Canada; and
- TransLink, Metro Vancouver, and other Metro Vancouver member municipalities.

The report will also be of secondary interest to jurisdictions elsewhere, including other Canadian municipalities that are reviewing their vehicle for hire and taxicab regulations in response to the introduction of new ridesourcing services.

1.3 GREENEST CITY SCHOLARS PROGRAM

The Greenest City Scholars Program is a partnership between the City of Vancouver and The University of British Columbia. Since 2010, the program sponsors UBC graduate students to work on sustainability projects with the City in support of the City’s Greenest City 2020 Action Plan (GCAP). The GCAP identifies ten long-term goals, each supported by a set of measurable and attainable targets for Vancouver to become the greenest city in the world by 2020.

In 2015, the Greenest City Scholars were working on 20 different projects that addressed 8 of the 10 GCAP goals, including: Climate Leadership, Green Buildings, Green Transportation, Zero Waste, Access to Nature, Lighter Footprint, Clean Water, and Local Food.

This GCS research project falls under the scope of GCAP Goal #4: Green Transportation, and was completed from May to October 2015, representing a total of 250+ hours.

Use of Terminology

- “**Taxi**” and “**taxicab**” are used interchangeably.
- “**Ridesourcing**” is generally preferred over “**ridesharing**,” as it is a more accurate term to describe the services provided by Uber, Lyft, Sidecar, and other app-based, digital dispatch transportation companies.
- “**Ridesourcing/ridesharing**” is used whenever referencing an organization or document that uses the term “**ridesharing**,” but when it would be more appropriate to use “**ridesourcing**”. This helps to ensure no ambiguity from the original source. However, this convention is not applicable when the organization or document is specifically referring to “**ridesharing**” and not “**ridesourcing**.”
- “**Transportation network company**” is the most common regulatory term found in legislation assigned to companies that provide “ridesourcing/ridesharing” services. “**Transportation network company**” is used interchangeably with “**ridesourcing company**.”
- “**Vancouver**” refers to the geographic Vancouver proper, as governed by the City of Vancouver. When referring to the region as a whole, the term “**Vancouver region**” is used. “**Metro Vancouver**” refers specifically to the regional government body.

2.0 METHODOLOGY

2.1 RESEARCH QUESTIONS

In response to the Council Motion, “City Action to Ensure Innovative, Increased Taxi Service”, the following research questions were developed to define the scope of the GCS project:

1. What existing research and literature is available on ridesourcing and Uber?
2. What are the impacts of ridesourcing and Uber, particularly in relation to the taxi industry?
3. What are the legislative and regulatory responses to ridesourcing and Uber?
4. What are the emerging regulatory frameworks and policy options for ridesourcing and Uber the City of Vancouver could consider?

2.2 RESEARCH OBJECTIVES

Based on the research questions, a set of research objectives were developed:

1. Review the existing scholarly, legal, and grey literature on ridesourcing and Uber;
2. Review the impacts of ridesourcing and Uber in North American jurisdictions, particularly in relation to the taxi industry;
3. Review the legislative and regulatory responses to ridesourcing and Uber based on peer North American jurisdictions;
4. Identify potential regulatory frameworks for the City of Vancouver to consider; and
5. Provide strategic recommendations and considerations for the City of Vancouver in developing a regulatory framework for ridesourcing.

2.3 RESEARCH METHODS

Four primary research methods were employed:

1. **Literature review** of published and English-

- language scholarly, legal, and grey literature;
2. **Policy review and analysis** of legislative and regulatory responses, and emerging regulatory frameworks among North American jurisdictions;
3. **Key informant meetings** with City staff, other jurisdictions, the taxi industry, and Uber; and
4. **3-1-1 case analysis** of submitted opinion and complaint cases to the City’s 3-1-1 service from the general public.

Data collection and analysis took place from June to early September 2015. **FIGURE 1** provides an overview of the methodology and the relationship between the research questions, objectives, and methods.

2.3.1 Literature Review

The following databases were used to locate relevant scholarly, legal, and grey literature: Google, Google Scholar, and HeinOnline (access through a subscription from UBC Library). Keywords used in search queries included, but were not limited to:

- “Uber”
- “Taxi”
- “Transportation network company”
- “Ridesourcing”
- “Ridesharing”

Researchers that conducted any previous work on ridesourcing were identified and contacted for guidance on identifying relevant articles. Unpublished work was also requested when appropriate.

All the collected documents were imported into the qualitative data analysis software, ATLAS.ti (Version 1 for Mac) and systematically coded in order to facilitate easy retrieval and analysis of the data.

2.3.2 Policy Review and Analysis

Jurisdictions in North America (primarily in Canada and the United States) were identified based on the

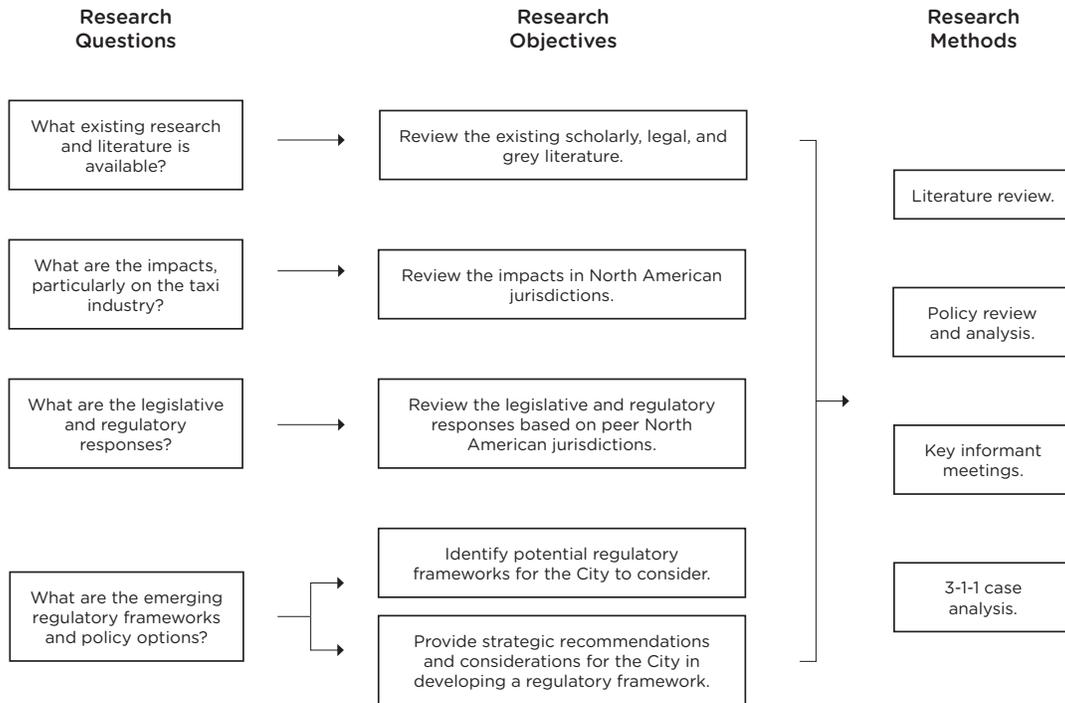


Figure 1. Overview of the research methodology for the GCS project.

collected literature and ongoing media coverage using the following criteria:

- Uber is currently operating or has expressed intention to operate in the jurisdiction;
- There has been a previous or ongoing court case(s) between Uber and the jurisdiction and/or the taxi industry;
- There is existing regulation developed for ridesourcing/ridesharing; and/or
- Regulation is currently being developed, particularly within the scope of a vehicle for hire or taxi regulation review.

In general, preference is given to referencing Canadian jurisdictions whenever possible to provide a more

comparative analysis. Copies of relevant pieces of legislation and regulation were downloaded and analyzed. Jurisdictions selected for final inclusion in the report met one of the following criteria:

- Jurisdiction is similar to Vancouver’s taxicab regulatory regime, with concurrent regulation at both the provincial/state and municipal/local level;
- Jurisdiction has pioneered regulation, or has unique regulatory aspects in their framework;
- Jurisdiction fell within the report scope of the recommended policy options and strategic considerations; and/or
- Jurisdiction has ongoing media coverage relating to Uber and the taxi industry.

2.0 | METHODOLOGY

In order to support monitoring of ongoing media coverage, a Google Alert was set-up from June to September using the following keywords:

- “Uber”
- “Uber Vancouver”
- “UberX”

To complement the North American review, all neighbouring municipalities and relevant agencies in Metro Vancouver were contacted in order to determine the status of any work being conducted by staff that related to ridesourcing. When possible, inquiries were directed to the most senior staff person responsible for vehicle for hire and/or business licensing. If there was no such person, the most senior engineering or planning staff was contacted. Finally, if there was no response received, the Chief Administrative Officer/City Manager was contacted.

The following questions were asked:

- Has Uber contacted or approached your municipality/agency?
- Has your municipality/agency conducted any work relating to ridesourcing/ridesharing and Uber, and its implications for regulations?
- If not, are there any plans for your municipality/agency to conduct work in the future?

2.3.3 Key Informant Meetings

Key informant meetings were held, either conducted individually by the Greenest City Scholar or where the Greenest City Scholar was present and the meeting was overseen by City staff (in Licensing, Transportation, and/or Sustainability). The key informant meetings served to provide a deeper understanding of ridesourcing from the perspective of the informant.

A full list of meetings can be found in **APPENDIX A: MEETING RECORDS**.

2.3.4 3-1-1 Case Analysis

3-1-1 is a service provided by the City that allows the public, including Vancouver residents and businesses, to connect directly with City Hall for non-emergency related issues. This includes the ability to submit questions, complaints, compliments, etc., and connect with City staff.

Analyzing 3-1-1 cases can help to provide a small glimpse of the public’s opinion on Uber in lieu of a dedicated public consultation process. A general keyboard search was used to query all 3-1-1 cases received and processed by City staff from January 1, 2012 to August 31, 2015 using the following keywords in the Lagan 3-1-1 software:

- “Uber”
- “Lyft”
- “Sidecar”
- “Taxi”
- “Taxis”
- “Cab”
- “Ridesharing”
- “Ridesourcing”

Some of the 3-1-1 cases included tweets directed to the City of Vancouver’s Twitter account and direct email messages.^[2] Cases that referenced the taxi industry as a whole, but not Uber, were excluded as it fell outside of the report’s research scope.

[2] City of Vancouver’s Twitter account (@CityofVancouver): <https://twitter.com/CityofVancouver>

2.4 RESEARCH LIMITATIONS

The GCS project had several research limitations that should be considered when interpreting the findings of the report:

- The majority of the GCS research conducted was secondary research;
- The research was limited in geographic scope to Canada and the United States;
- The research was limited to analyzing English-language documents;
- There is a lack of publicly available data about Uber's operation as they are a private company;
- As Uber, and particularly the uberX service, is a relatively new phenomenon, there is limited unbiased and peer-reviewed empirical research available to inform transportation policy and decision-making; and
- The experiences of Uber and ridesourcing in other jurisdictions may not necessarily be wholly applicable to the context of Vancouver.

3.0 | BACKGROUND AND CONTEXT

3.0 BACKGROUND AND CONTEXT

3.1 STATUTORY AND REGULATORY AUTHORITY

In British Columbia, the role of regulating taxis is shared between the provincial government and local governments. The Province of BC regulates taxis through the BC Passenger Transportation Board (PTB). The City of Vancouver has additional authority under The Vancouver Charter through the Vehicles for Hire Bylaw to regulate taxis, including the number of taxi licenses.

In essence, the main role of the PTB is the regulation of the number of taxi licenses and basic regulations over vehicles, while the City of Vancouver's role is the additional regulation of service quality for both drivers and vehicles. In the specific case of the City of Vancouver, both the City and the PTB have concurrent jurisdictions to regulate taxis.^[3] As such, the City can exercise its additional authority to regulate the number of taxis in Vancouver without the need to defer in any manner to the PTB. However, approval from both authorities is required before a taxi is legally allowed to operate and provide transportation service to passengers in Vancouver.

Understanding the existing legislative and regulatory regime will be important when considering developing ridesourcing regulation at the City, as:

- Ridesourcing activities will fall within the scope of vehicle for hire;
- Uber and other ridesourcing companies would require both PTB and City approval;
- Several jurisdictions have challenged the legality of ridesourcing companies in court based on their existing taxi regime, but were ultimately unsuccessful; and

[3] Confirmed by the BC Supreme Court in *Delta Sunshine Taxi (1972) Ltd. v. City of Vancouver*, 2015 BCSC 357: [50] There is no indication in the Passenger Transportation Act that the legislature intended that the Board's general authority to grant applications supersedes the specific authority of the City to limit the number of taxis that operate in Vancouver; [54] I conclude that the Vancouver Charter authorizes the City to pass by-laws with respect to the number of taxis to be licensed in the City. It is well within the City's general powers and specifically authorized by s. 317(1)(m). Retrieved from: <http://www.courts.gov.bc.ca/jdb-txt/SC/15/03/2015BCSC0357.htm>

- Most importantly, the regulatory authority and specific approach for ridesourcing, if introduced in British Columbia and Vancouver, is currently unclear given the City and the PTB share concurrent jurisdiction. One option for the PTB and City is to adopt a similar regime to taxis with concurrent authority. However, there have also been different types of arrangements in different jurisdictions, each with their trade-offs to consider.

The following sections briefly describe the various statutory and regulatory authority considerations that influence the City's taxi regime, and thus any potential ridesourcing framework.

3.1.1 Passenger Transportation Act and Board

The Passenger Transportation Act sets out three types of commercial passenger vehicles in BC:

1. **Passenger directed vehicles** (e.g., taxis, limousines, shuttle vans);
2. **Inter-city buses** (e.g., buses that operate on a schedule); and
3. **General passenger vehicles** (e.g., sightseeing buses, tour buses).

The Act also sets out two types of license authorizations:

1. General Authorization; and
2. Special Authorization.

The Registrar, Passenger Transportation Branch makes decisions on applications for General Authorization Licenses, while the Passenger Transportation Board (PTB) makes decisions on applications for Special Authorization (see **FIGURE 2**).

The Passenger Transportation Board is an independent tribunal established under the authority of the BC Passenger Transportation Act, and falls under the responsibility of the BC Ministry of Transportation and Infrastructure. The PTB regulates all commercial passenger directed vehicles in the province through

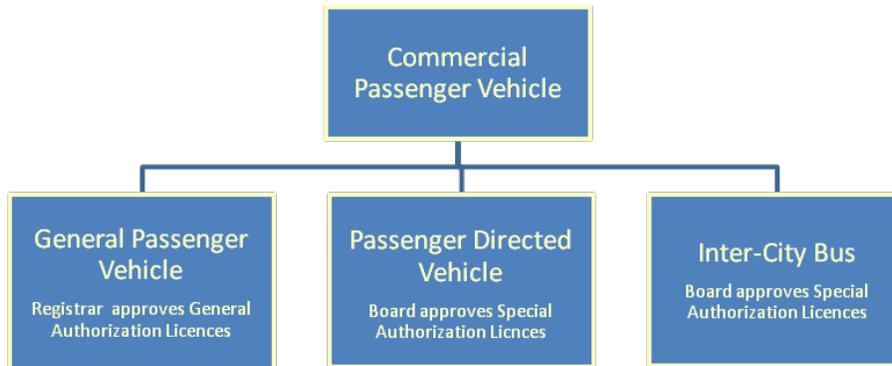


Figure 2. License authorization responsibilities for the Passenger Transportation Branch and Board.

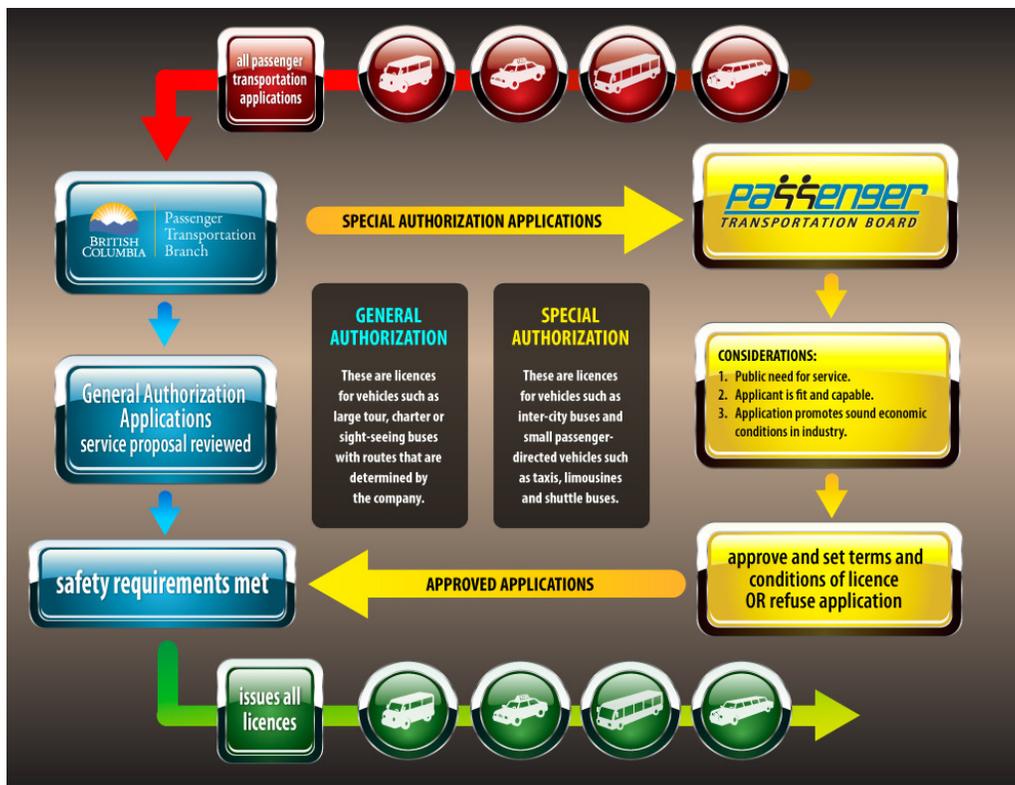


Figure 3. License application process for the Passenger Transportation Branch and Board.

3.0 | BACKGROUND AND CONTEXT

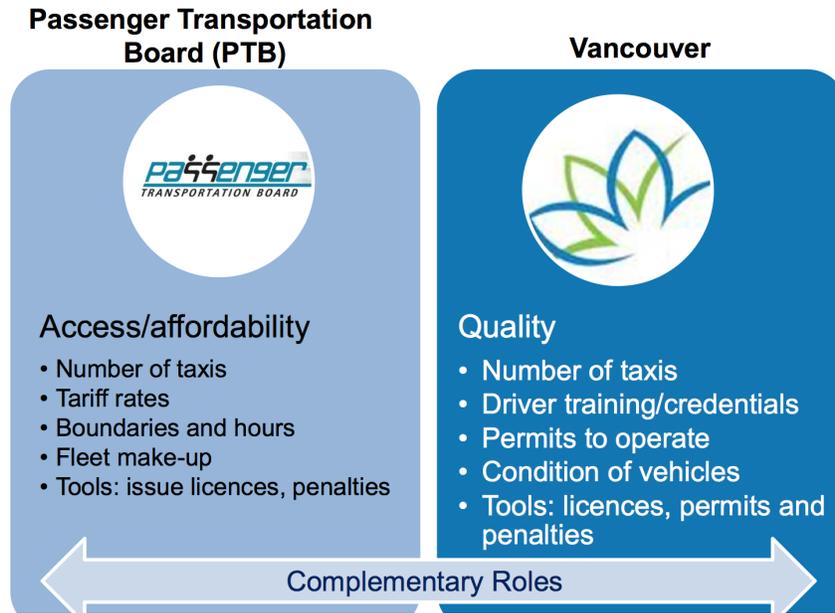


Figure 4. Complementary roles of taxi regulations between the PTB and the City.

licenses, including taxis, limousines, and shuttle vans. License authorization is based on an evaluation of the following criteria:

1. There is a public need for the service the applicant proposed to provide under any special authorization;
2. The applicant is a fit and proper person to provide that service and is capable of providing that service; and
3. The application, if granted, would promote sound economic conditions in the passenger transportation business in British Columbia.

The PTB sets basic requirements for taxis, including requirements for licenses, safety, service, and green technology.

FIGURE 3 provides a summary of the commercial transportation license application process.

3.1.2 The Vancouver Charter and Vehicles for Hire Bylaw

The Vancouver Charter is the provincial statute that incorporates the City of Vancouver, and grants the City special municipal powers relative to other BC local governments. In the Charter, the City is given specific power to regulate and limit the number of taxis:

272. (1) *The Council may from time to time make by-laws...*

(a) *for providing for the licensing of any person carrying on any business, trade, profession, or other occupation ...*

317. (1) *The Council may make bylaws ...*

(m) *for regulating the number of vehicles with respect to which persons may be licensed in any class of carriers ...*

The City exercises this authority through the Vehicles for Hire Bylaw. The City may issue or deny taxi licenses to companies only after the PTB has first issued licenses that would allow taxis to operate in Vancouver. For this reason, approval from both the PTB and City is required before a taxi is allowed to provide passenger transportation services in Vancouver (see Figure 4).

The Vehicles for Hire Bylaw sets requirements for vehicle age and condition, driver licensing and identification, and vehicle inspections.

The following definitions are provided in the Vehicles for Hire Bylaw:^[4]

“Vehicle for Hire” means a vehicle used for the carrying, transportation or conveyance of persons or property for hire and, without limiting the generality of the foregoing, shall for the purpose of this By-law include the following classifications:

“Dual Taxicab”, which means a taxicab that includes accommodation for at least one passenger using a mobility aid.

“Part-time Taxicab”, which means a taxicab licensed to operate part time in the City of Vancouver on weekends and on those days designated in this By-law.

“Taxicab”, which means a motor vehicle with a seating capacity of no fewer than four and no more than seven passengers.

“Limousine” includes an Antique Limousine, Bus Limousine, Luxury Limousine, Sedan Limousine, Sport Utility Limousine and Stretch Limousine, all as defined under “Vehicle for Hire” in this section 2.

“Taximeter” means any mechanical or electronic instrument or device by which the charge for

transportation in any taxicab is mechanically or electronically calculated either for distance travelled or for waiting time, or both, and upon which the charge is indicated by means of figures.

“Mobility Aid” means a device, including a manual wheelchair, electric wheelchair and scooter, that is used to facilitate the transport, in a normally seated orientation, of a person with a physical disability.

3.2 OTHER VEHICLE FOR HIRE REQUIREMENTS

3.2.1 Vancouver Police Department’s Chauffeur’s Permit

In addition to the Vehicles for Hire Bylaw, the City of Vancouver further requires taxi drivers to apply and hold a Chauffeur’s Permit that is issued by the Vancouver Police Department. The Police Department performs driver background checks and administers tests to ensure safe and high-quality drivers. Types of offences or convictions that results in the Chauffeur’s Permit being denied, suspended, or cancelled include:

- Any conviction for a sexual offence (suspension indefinite);
- Any criminal conviction for a criminal offence related to the profession in the previous three years;
- A conviction of three or more Motor Vehicle offences in the preceding two years while driving a vehicle for hire;
- A driving prohibition for alcohol or drugs in the preceding three years while driving a vehicle for hire; and
- Use of or dealing in narcotics or drugs.

3.2.2 Insurance Corporation of BC’s Commercial Insurance

Taxi drivers also need to meet commercial insurance

[4] As defined in the consolidated May 12, 2015 version of the City of Vancouver’s Vehicles for Hire Bylaw (No. 6066).

3.0 | BACKGROUND AND CONTEXT

Table 1. Summary of taxi regulations for taxi companies and drivers in the City of Vancouver.

Regulation	Passenger Transportation Board (PTB)	Insurance Corporation of British Columbia (ICBC)	City of Vancouver (CoV)
Licenses			
License	Conditions of license	-	Taxi premise license
Taxi Plate and Decal	Plate and decal	Commercial license plate	Plate and decal
Commercial Vehicle License	-	-	Decal
Pick-up Locations	Set pick-up boundaries	-	-
Safety			
Driver's License	-	Class 4 (Commercial)	Class 4 (Commercial)
Chauffeur's Permit	-	-	Vancouver Police Department
Criminal Record Check	-	-	Regular checks
Driver Abstract Check	-	-	Regular checks
Driver Training	-	-	TaxiHost Pro course
Driver Safety Certification	National Safety Code certificate	-	-
Vehicle Safety Inspection	Semi-annually	-	-
Vehicle Age	-	-	New vehicles must not be more than 2 years old
Vehicle Identification	Top light; unique identifier number	-	Top light; signage (company name and unique identifier number)
Maximum Driving Hours	13 hours (Motor Vehicle Act)	-	-
Insurance	Commercial	Commercial	\$1 million liability insurance for accessible vehicles
Service			
Rates	Fixed rates	-	As per PTB rates
Cleanliness Inspection	-	-	Semi-annually
Accessibility	Special licenses issued for accessible vehicles	-	Accessibility regulations, including required equipment
Business Premise	-	-	Requires place of business within Vancouver
Green Technology			
Fuel Efficiency	Minimum efficiency for new vehicles	-	-

requirements from the Insurance Corporation of British Columbia (ICBC), a provincial crown corporation in charge of drivers’ licenses and motor vehicle claims. Insurance is assigned a specific taxi rate class where drivers must carry over \$1 million in coverage.

Unlike jurisdictions in the United States, ICBC’s public insurance requirements have implications for developing insurance that covers ridesourcing activities, which are currently inadequate in Vancouver for Uber drivers.

3.2.3 Vancouver Taxi Association’s Ask-Listen-Act Driver Training

The Vancouver Taxi Association (VTA), a non-profit organization that represents the four taxi companies in Vancouver (Black Top Checker Cabs, MacLures Cabs, Vancouver Taxi, and Yellow Cabs), developed the Ask-Listen-Act Enhanced Taxi Driver Training program.

In addition to other training requirements required by the PTB and the City of Vancouver, all taxi drivers are required to take this six-hour training program to ensure

they are able to safely and respectfully serve customers with disabilities and older adults. It is the first program of its kind in Canada, and represents the Vancouver’s taxi industry commitment to improving services for passengers.

3.3 SUMMARY OF VEHICLE FOR HIRE REQUIREMENTS

In summary, for a driver to operate a taxi vehicle in Vancouver, they must have the following:

- Vehicle for Hire license from the City of Vancouver for a taxicab;
- Passenger Transportation license from the BC Passenger Transportation Branch;
- Chauffeur’s Permit from the Vancouver Police Department;
- Class 4 Driver’s License from ICBC;
- Police background check from the Vancouver Police Department; and
- TaxiHost Pro certificate from the Justice Institute’s Taxihost Training program.

Table 2. Comparison between Uber and taxi regulations.

Regulation	Uber’s Unregulated Model	Taxi’s Regulated Model
Supply	<ul style="list-style-type: none"> • Unregulated number of vehicles. 	<ul style="list-style-type: none"> • Regulated number of vehicles, i.e., cap
Fares	<ul style="list-style-type: none"> • Unregulated minimum or maximum fare. • Surge pricing (increased fares) during periods of high demand. 	<ul style="list-style-type: none"> • Consistent fares 24/7.
Safety	<ul style="list-style-type: none"> • Self-conducted vehicle and driver safety checks. • In-house training. • No Chauffeur’s Permit required. 	<ul style="list-style-type: none"> • Conducted by objective third-party. • Training by BC Justice Institute. • Chauffeur’s Permit required.
Liability	<ul style="list-style-type: none"> • Drivers’ personal insurance coverage coupled with blanket liability policy. 	<ul style="list-style-type: none"> • Commercial vehicle insurance from ICBC.
Licensing	<ul style="list-style-type: none"> • Class 5 Driver’s License (non-commercial use). 	<ul style="list-style-type: none"> • Class 1, 2, or 4 (commercial use).

3.0 | BACKGROUND AND CONTEXT

Table 1 provides a basic summary of taxi requirements for companies to operate in the City of Vancouver. Table 2 provides a basic summary of the key differences between Uber (when unregulated) and taxis in Vancouver.

3.4 COUNCIL MOTION AND POLICY CONTEXT

Three mandates guided the work of the GCS research project: the October 2014 Council Motion, the Transportation 2040 Plan, and the Greenest City 2020 Action Plan.

3.4.1 Council Motion

In October 2014, Council passed the Motion, “City Action to Ensure Innovative, Increased Taxi Service” that asked staff to prepare a report on:

- Measures to expand taxi service through environmental, safety, and service standards;
- Response to an application by suburban taxi companies to operate in Vancouver during peak weekend periods; and
- Measures to enable customers to benefit from “ride-sharing” technology without undermining industry standards.

The Motion placed a moratorium on taxi license issuance for staff to have time to study the issue, which included a review of the City’s existing regulations and best practices. Staff requested an extension in March 2015, which launched a program of action that included stakeholder consultation with members of the Vancouver Taxi Roundtable and other stakeholders as part of the new Vehicle for Hire Dialogues.

The Taxi Roundtable includes representatives of the taxi industry, the Passenger Transportation Board, Tourism Vancouver, Justice Institute, and the City of Vancouver that have been meeting since 2006 to address taxi-related issues and explore options to improve service.

Staff are expected to report back to Council in October 2015. The GCS research project specifically addresses the “ride-sharing” part of the motion (bolded below) and will inform the development of the October 2015 staff report to Council, and future work dependent on Council’s direction.

THEREFORE BE IT RESOLVED

- A. THAT Council affirm its commitment to ensure Vancouver’s taxi service remains an industry leader in the provision of safe, timely, economical, accessible, green and innovative service.*
- B. THAT Council direct staff to immediately prepare an amendment to the Vehicles for Hire By-law to suspend the issuance of any new licences with the exception of those referred to in C below, for a period of six months to allow for consultation with the Taxi Roundtable and other stakeholders and to report to Council at the end of that time on:*
 - measures necessary to expand service, while ensuring the industry responds to the needs of consumers and stakeholders in the tourism, hospitality and the disability community through innovation and best-in-class standards for environmental standards, safety and service;*
 - a process to respond to the PTB decision to allow suburban taxis to work in Vancouver during certain periods;*
 - **measures to ensure customers achieve the full benefits of new “ride-sharing” technology without undermining the existing industry’s standards for safety, accessibility, driver training and green technology.***
- C. THAT Council affirm its support for the Vancouver Taxi Association’s proposal to add 78 full-time accessible taxis to the city fleet which is now under PTB review,*

immediately inform the PTB of that support and expedite licenses through a report to Council if the PTB approves this proposal.

- *Transit #2: Reduce average distance driven per resident by 20% from 2007 levels.*

3.4.2 Transportation 2040 Plan

The Transportation 2040 Plan is the City’s long-term strategic plan to guide transportation and land use decisions and investments. Ridesourcing was not specifically addressed in the Plan as it is a relatively new phenomenon in urban transportation planning, and was not something considered during the development of the Plan.

As ridesourcing generally relates to taxis, the “Motor Vehicle Policies” section in the Plan provide high-level policy direction:

M 6. Taxis

- *M 6.1. Support improved taxi service.*
- *M 6.2. Support safe use of taxis for persons with disabilities.*

In addition to responding to the Council Motion, it is intended that the outcomes of this GCS research project will inform future policy work relating to ridesourcing under the scope of transportation planning.

3.4.3 Greenest City 2020 Action Plan

The Greenest City Action Plan aspires for Vancouver to become the greenest city in the world by the year 2020 through specific goals and targets. Vehicles for hire and taxis, and by extension, ridesourcing, can help support alternative modes of transportation, and may potentially reduce automobile dependency.

Goal #4: Green Transportation: Make walking, cycling, and public transit preferred transportation options.

- *Target #1: Make the majority (over 50%) of trips by foot, bicycle, and public transit.*

3.0 | BACKGROUND AND CONTEXT

3.5 THE RIDESOURCING INDUSTRY

3.5.1 What is Ridesourcing?

Ridesourcing is a form of transportation that provides on-demand vehicle for hire services, where passengers “source” rides through a mobile smartphone-based app from a pool of private passenger vehicles, typically driven by non-professional drivers who use their own personal vehicles for ridesourcing activities. Uber, Lyft, and Sidecar are the major ridesourcing/ridesharing companies in North America.

Ridesourcing is part of a larger family of shared mobility, a type of transportation that “provides access to services shared amongst users on a short-term, as-needed basis.”^[5] Shared mobility services are part of the larger new sharing economy, also known as the collaborative or peer-to-peer economy. It refers to “businesses that provide consumers the ability and platform to share resources and services.” Sharing economy services include shared vehicles (e.g., bike sharing), housing (e.g., AirBnB), real estate (e.g., coworking spaces), and property (e.g., tool libraries).

Companies such as Uber contend that their service offers several benefits to consumers, including:

- Shorter wait times, lower fares, and higher customer satisfaction;
- Convenient and cashless passenger experience;
- Easy-to-use app with ability to rate both drivers and passengers;
- Use of demand-based prediction results in higher supply during peak periods;
- Opportunity for employment, especially for people seeking flexible hours;
- Opportunity to supplement the public transportation system.

However, concerns have been raised regarding:

- Passenger safety;

- Insurance coverage and liability;
- Working environments for drivers;
- Availability of accessible service for the disability community; and
- Future viability of the taxi industry.

3.5.2 Ridesourcing vs. Ridesharing

While ridesourcing companies often claim they are providing *ridesharing* services, scholars and commentators have noted distinct differences between the two types of transportation services, and argue that there should be a meaningful separation between ridesourcing and ridesharing.^[6] To aid understanding, it is worth delineating what Uber and their most popular ridesourcing service, uberX, is and is not:

- uberX is not **carsharing**—carsharing is where passengers rent cars on a short-term basis, usually through a membership to the company; the passenger may be required to return the vehicle to the original pick-up location (two-way carsharing), pick-up and drop off the vehicle in a different location (one-way carsharing), or rent a vehicle directly from another individual for a limited period of time (peer-to-peer).
- uberX is not **ridesharing (traditional)**—traditional ridesharing is where a driver and passenger share a common origin-destination by way of carpooling or vanpooling; ridesharing is focused on filling empty seats in the vehicle, typically with the driver adopting a non-profit motivation and having a goal of reducing travel costs, congestion, and fuel consumption
- uberX is not **ridesharing (real-time/on-demand/dynamic)**—real-time/on-demand/dynamic ridesharing is the same as traditional ridesharing, but takes advantage of a web-based service (usually accessed through a

[5] One Earth. (2015). *Local Governments and the Sharing Economy Project Roadmap Report*. Vancouver: One Earth.

[6] Rayle, L., Shaheen, S., Chan, N., Dai, D., & Cervero, R. (2014). *App-based, on-demand ride services: Comparing taxi and ridesourcing trips and user characteristics in San Francisco*. Berkeley: University of California Transportation Center. Retrieved from: <http://www.uctc.net/research/papers/UCTC-FR-2014-08.pdf>

smartphone app) that uses GPS and a social network to pair drivers and passengers that share a common origin-destination together.

- uberX is not **ridesharing (taxi)**—taxi ridesharing uses a web-based, smartphone app service that matches passengers with a similar origin-destination in order to allow them to share the same taxi together.

Instead, scholars and commentators argue that uberX is **ridesourcing**—drivers and passengers typically do not share a common origin-destination, and the driver has a for-profit motivation, i.e., drivers engage in ridesourcing as a way to make income or supplement their existing income. As a result, passengers “source” rides from a pool of private passenger vehicles. Furthermore, drivers may deadhead (operate the vehicle while not carrying a passenger) while waiting to match with a passenger, or in order to seek passengers in a higher demand area. This may potentially increase congestion, fuel consumption, and emissions, contrary to the philosophy and characteristics of ridesharing.

For the above reasons, ridesourcing drivers effectively perform the role of a vehicle for hire taxi service, but through a similar, but different business model. That being said, Uber’s business model is continuously evolving; the company continues to add new services that are characteristic of other existing transportation services, further blurring definitions, such as uberPOOL and uberCOMMUTE, new Uber services that are

characteristic of traditional carpooling.

In addition to the term “ridesharing”, ridesourcing is also known by other names, including “ride-hailing,” “electronic hailing (e-hail),” and “electronic cab (e-cab).” Regulatory categories assigned to ridesourcing companies differ by jurisdiction, but include:

- Transportation network company (TNC);
- Transportation network provider (TNP); and
- Digital dispatch company (DDC).

Precisely defining ridesourcing is not a trivial matter. An ethnographic study conducted on ridesharing and ridesourcing drivers found that drivers typically fell within three categories:^[7]

1. **Incidental drivers**—drivers who provide ridesharing services only occasionally such as when commuting to and from work. These drivers adopt the “sharing” and “collaborative” philosophy of ridesharing.
2. **Part-time drivers**—drivers who provide services to supplement income from other employment sources. These drivers are likely to work several hours at a time and have routine shifts.
3. **Full-time drivers**—drivers who provide ridesharing and ridesourcing services as a primary means of income.

[7] Anderson, D.N. (2014). “Not just a taxi? For-profit ridesharing, driver strategies, and VMT.” *Transportation*, 41: 1099-1117.



Incidental drivers act the most like traditional ridesharing drivers, and are the least likely to take trips without shared destinations, or to be willing to drive empty any great distance to pick up a fare; thus, they are more likely to perform the [vehicle miles travelled (VMT)]-subtractive service of traditional ridesharing. They were more likely to voice social rather than economic motivations for sharing rides, and in some cases denied that ridesharing was a “job.” ...

Both part-timers and full-timers were more likely to voice economic motivations, and to consider ridesharing a job, equivalent to driving a taxi; several of those interviewed had, in fact, previously been employed as taxi drivers, or had considered such employment before taking the ridesharing job. Compared to incidentals, they were more likely to actively seek out fares, and to be ***willing to dead-head to reach passengers, thus performing the [VMT] additive service of the traditional taxicab.***

3.0 | BACKGROUND AND CONTEXT

Uber drivers are more characteristic of part-time and full-time drivers. As a result, they may have a different transportation impact compared to traditional ridesharing (incidental) drivers. Differentiating between ridesourcing and ridesharing is thus crucial in understanding the specific and differential impacts the two types of services may have, which has implication for transportation policy and decision-making. Any research in this area requires an explicit definition of the type of service (ridesourcing or ridesharing) under study, and careful examination of any source being reviewed and what specific service they are referring to, to avoid conflation.

3.5.3 What is Uber?

Uber Technologies Inc. is an international company based in San Francisco. It is the largest and fastest growing ridesourcing/ridesharing company, estimated to be worth \$50 billion in 2015.^[8]

[8] Macmillan, D., & Demos, T. (2015, July 31). "Uber valued at more than \$50 billion." *The Wall Street Journal*. Retrieved from: <http://www.wsj.com/articles/uber-valued-at-more-than-50-billion-1438367457>

[9] Ahsan, S., & Hensley, L. (2015, August 21). "Summer of Uber: Everything you need to know about the upstart ride-sharing service." *The National Post*. Retrieved from: <http://news.nationalpost.com/news/canada/summer-of-uber-everything-you-need-to-know-about-the-upstart-ride-sharing-service>

How big is Uber?

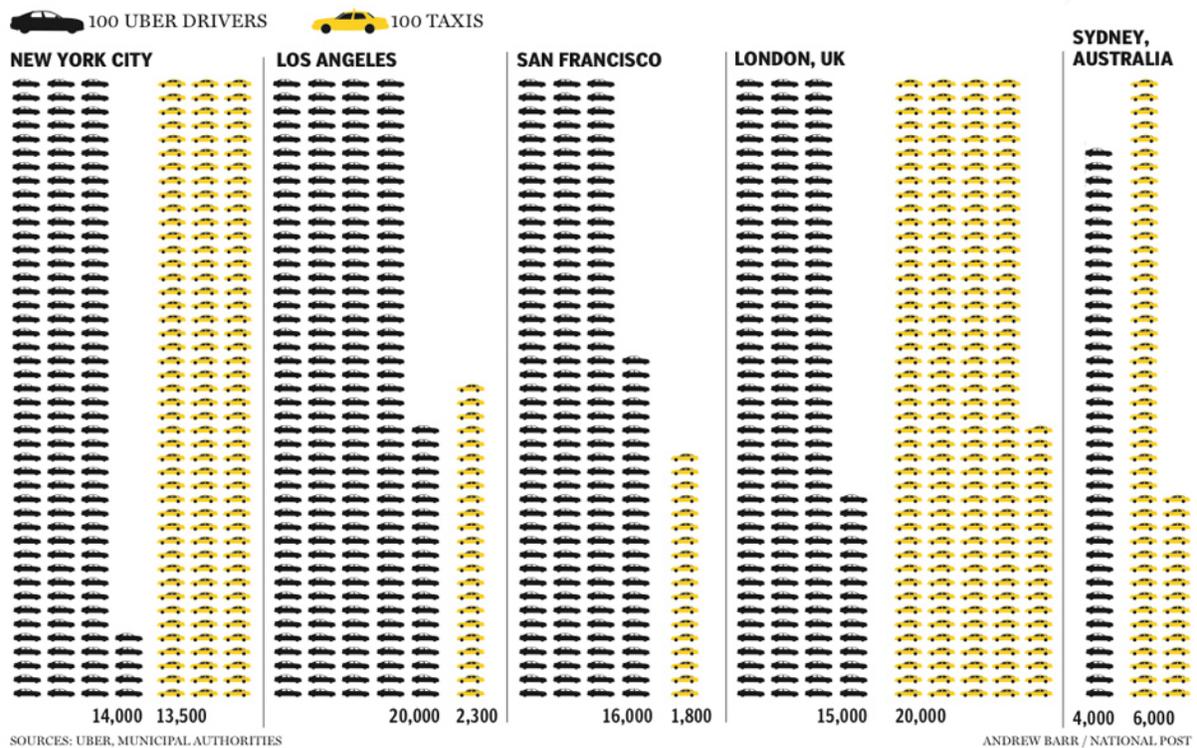
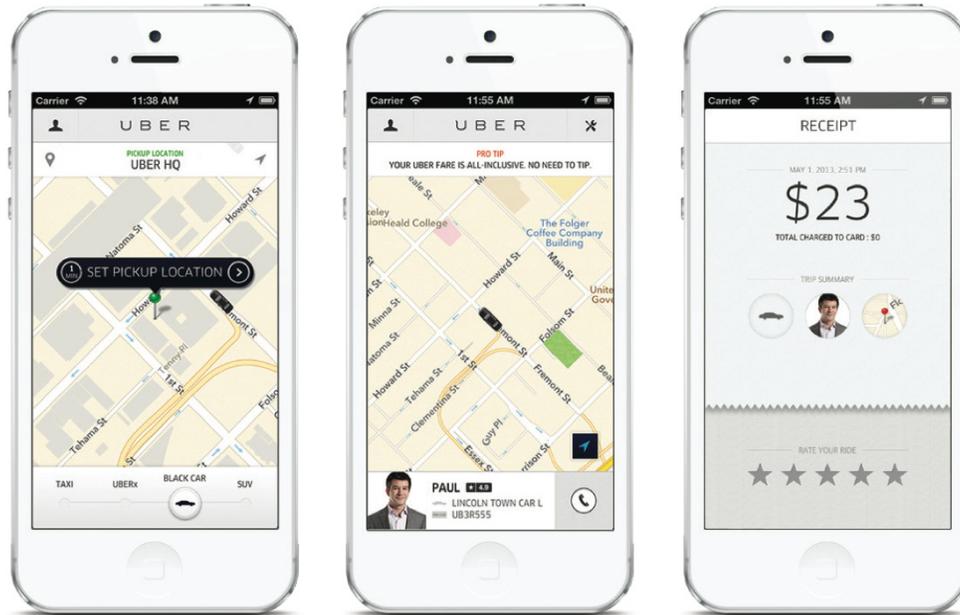


Figure 5. Number of Uber drivers versus taxi drivers in New York City, Los Angeles, San Francisco, London, and Sydney.^[9]



REQUEST

Tap to select a pickup location.

RIDE

Sit back and relax, tell your driver your destination.

RATE

Help us maintain a quality service by rating your experience.

Figure 6. Screenshots from the Uber app showing the general process for requesting a ride.

Uber uses a smartphone app to connect riders with available drivers who provide transportation services using their personal vehicles. When a passenger requests a ride, the Uber app contacts the nearest driver. Before confirming the trip, both passenger and driver can view each other’s photo, profile, and rating. The passenger is provided with the fare rate and estimated cost. The app then guides and tracks the driver to the passenger’s pick-up location. At the end of the trip, payment is automatically charged to the passenger’s credit card, which has been pre-registered with Uber when passengers first sign up for the service. A tip is not included in the transaction, providing a completely cashless experience.

The fare at the regular rate is generally cheaper than conventional taxis, as Uber deliberately undercuts their competition. However, the fare rate may surge, sometimes as high as eight times regular fare, during times of high demand. This “surge pricing” provides an incentive for additional drivers to make themselves available in order to meet customer demand.

Drivers, who are currently considered independent contractors, keep 80 percent of the fare while Uber retains 20 percent of the fare. Drivers are responsible for costs such as fuel, cleaning, maintenance, and insurance. Uber covers the costs of the app and related tech support, marketing, some level of liability insurance, and

3.0 | BACKGROUND AND CONTEXT

TRIP REQUEST DATE
January 1, 2012 at 01:27am

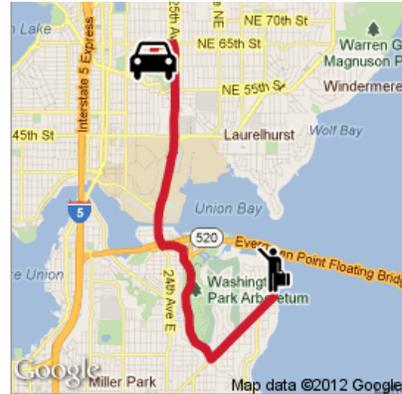
PICKUP LOCATION
4226 E Madison St, Seattle, WA

DROPOFF LOCATION
6119 21st Ave NE, Seattle, WA

CREDIT CARD
Personal MasterCard - 3315

BILLED TO CARD
\$143.00

NOTES
This trip includes a surcharge for increased demand over New Year's Eve.



Fare Breakdown

CHARGES	
Base Fare	\$7.00
Distance	\$19.19
Time	\$2.55
New Year's Rate x5.0	\$114.96
Charge subtotal	\$143.70
DISCOUNTS	
Rounding Down	(\$0.70)
Discount subtotal	(\$0.70)
TOTALS	
Total Fare	\$143.00
Billed to Card	(\$143.00)
Outstanding Balance	\$0.00

Trip Statistics

DISTANCE	5.21 miles
DURATION	14 minutes, 38 seconds
AVERAGE SPEED	21.34 mph

Figure 6. Screenshots from the Uber app showing the general process for requesting a ride.^[10]

credit card fees. Uber fares are calculated based on the following formula:

$$\text{Base Fare} + \text{Per Minute} + \text{Per Kilometre Travelled} + \text{Surge Multiplier (if applicable)}$$

The base fare is dependent on the specific Uber service the passenger is using (see TABLE 3). Calculations may also differ based on the jurisdiction. For example, in some jurisdictions, the per minute component only takes effect when the vehicle is driving under a certain speed.

FIGURE 5 provides an overview of the number of Uber drivers versus taxi drivers in select jurisdictions. FIGURE 6 provides a brief overview of the app, and FIGURE 7 provides an example of a receipt from Uber.^[10]

Uber offers a variety of transportation services in the North American market (see TABLE 3). For comparison purposes, taxi fares in Vancouver are provided in TABLE 4.

[10] Hughes, N. (2012, January 2). "Hey Uber, I Like Your Ride...But Not Sure It's Worth the \$143 You Charged Me." So *Entrepreneurial*. Retrieved from: <http://soentrepreneurial.com/2012/01/02/hey-uber-i-like-your-ride-but-not-sure-its-worth-the-143-you-charged-me>

Table 3. Uber service comparison for Toronto, Canada.

Uber Service	Description	Base Fare	Per Minute	Per Kilometre	Additional Fees
uberX	<ul style="list-style-type: none"> “The low-cost Uber.” Up to four passengers with regular vehicles (four-door car, truck, or minivan) that are model year 2006 or newer. 	\$2.50	\$0.18	\$0.80	<ul style="list-style-type: none"> Safe Rides Fee: \$1.50 Minimum Fare: \$4.00 Cancellation Fee: \$5.00
uberXL	<ul style="list-style-type: none"> “The low-cost SUV option.” Up to six passengers with a SUV or minivan that are a model year 2006 or newer. 	\$2.50	\$0.35	\$1.55	<ul style="list-style-type: none"> Safe Rides Fee: \$1.50 Minimum Fare: \$4.00 Cancellation Fee: \$5.00
uberSELECT/PLUS	<ul style="list-style-type: none"> “A step above the every day.” Up to four passengers with premium/higher end sedans that have a leather interior (e.g., BMW, Mercedes, Audi). 	\$5.00	\$0.35	\$1.80	<ul style="list-style-type: none"> Safe Rides Fee: \$1.50 Minimum Fare: \$10.00 Cancellation Fee: \$5.00
UberBLACK	<ul style="list-style-type: none"> “The original Uber.” Up to four passengers, with multiple tiers of black cars that are a luxury black sedan (commercially registered and insured) with black leather interior that are year 2012 or newer driven by professional drivers. 	\$8.00	\$0.50	\$2.70	<ul style="list-style-type: none"> Minimum Fare: \$15.00 Cancellation Fee: \$10.00
UberSUV	<ul style="list-style-type: none"> “UberSUV.” Up to four passengers, with multiple tiers of black cars that are a luxury black SUV (commercially registered and insured) with black leather interior that are year 2012 or newer driven by professional drivers. 	\$15.00	\$0.60	\$2.80	<ul style="list-style-type: none"> Minimum Fare: \$25.00 Cancellation Fee: \$10.00
uberTAXI	<ul style="list-style-type: none"> “Taxi without the hassle.” Uses Uber platform to request and pay for a taxi at standard taxi meter rates, plus a 20% gratuity automatically added for the driver by default. 	N/A	N/A	N/A	<ul style="list-style-type: none"> N/A

Note: The fare rates provided are for Uber services in Toronto, Canada as of August 2015. Service names and requirements may differ from jurisdiction to jurisdiction, especially across continents.

Table 4. Regulated taxi fares in Vancouver, Canada.

Base Fare	Per Kilometre	Per Hour (Per Minute)
\$3.20	\$1.84	\$32.86 (\$0.55)

Note: Minimum base fare covers the first 1/13th of a kilometre (54.44 metres). Fares are calculated using base fare plus distance rate is \$0.10 for each additional 54.44 metres (\$1.85/km) or time rate is \$0.10 for each additional \$10.95 seconds (\$32.86/hour), whichever is greater.

4.0 | REVIEW OF UBER IN VANCOUVER

4.0 REVIEW OF UBER IN VANCOUVER

4.1 HISTORY

Uber briefly operated in the Vancouver region from May to November 2012 with their luxury sedan service, UberBLACK, during their “Secret Uber” testing period. This included a word-of-mouth campaign with occasional free rides for passengers to high profile events in Vancouver in order to publicize their service before the planned official launch.^[11] During this soft launch period, Uber operated a limited number of vehicles and recruited certified drivers who held a PTB license and valid Chauffeur’s Permit.^[12]

The PTB was eventually notified of Uber’s operation in the Vancouver region and informed Uber that their UberBLACK service was classified as a limousine service. As such, the PTB required Uber to apply for a limousine license that charged a minimum rate of \$75 per trip, regardless of distance or time travelled (see **APPENDIX D: PASSENGER TRANSPORTATION BOARD’S INDUSTRY NOTICES**). Uber initially indicated that they would continue to operate in Vancouver and comply with PTB regulations, but the supply of drivers dwindled and the company eventually withdrew from the Vancouver market.^[13]

Uber is expected to make another entry attempt into Vancouver. In October 2014, Uber hosted a driver hiring fair, offering a \$40 incentive for applicants.^[14] The provincial government responded that they would conduct undercover operations through enforcement officers to ensure any company that provides a taxi-like service is properly licensed. The government also indicated they would pursue legal action if Uber

operated in BC without the proper licenses.^[15]

APPENDIX C: MEDIA COVERAGE OF UBER IN VANCOUVER provides a list of media articles from 2012 to 2015.

4.2 CURRENT EVENTS

Since the company’s retreat from Vancouver, Uber has launched a public campaign urging the provincial government and the City of Vancouver to allow them to operate. This includes a public petition^[16] and publicity events such as ice cream and puppy delivery^[17] as of August 2015 (see **APPENDIX E: UBER’S PETITION TO OPERATE IN VANCOUVER**).

Uber is a participant of the Vehicle for Hire Dialogues as part of the work City staff is doing in response to the Council Motion. The company has been in contact with City staff, including as a participant to this GCS research project. Uber has also approached municipalities in Metro Vancouver expressing a willingness to work with them to allow lawful operation of their service.

4.3 FARE COMPARISON: UBER VERSUS TAXI

Uber typically sets its fare structure to be competitive with the taxi industry, and deliberately undercuts existing taxi fares. As a result, fares for uberX, the company’s most popular service, are often cheaper than conventional taxis, providing a financial incentive for passengers to choose Uber’s service.

In order to compare potential fares for Uber versus taxis in the Vancouver context, fares for taxi trips and various

[11] Schelling, S. (2012, November 28). “Uber town-car service shut down in Vancouver by B.C. Passenger Transportation Board.” *The Georgia Straight*. Retrieved from: <http://www.straight.com/news/uber-town-car-service-shut-down-vancouver-bc-passenger-transportation-board>

[12] City of Burnaby. (2014). *Uber ride-sharing service (Council Report)*. Burnaby: City of Burnaby. Retrieved from: [https://burnaby.civicweb.net/document/15149/2014%2010%2027%20-%20Uber%20Ride%20Sharing%20Service%20\(2\).pdf?handle=0D3A2835E0894B86ABC9677C427A620B](https://burnaby.civicweb.net/document/15149/2014%2010%2027%20-%20Uber%20Ride%20Sharing%20Service%20(2).pdf?handle=0D3A2835E0894B86ABC9677C427A620B)

[13] Uber. (2012, November 22). “Regulators Demanding Uber Vancouver Price Increase! We Need Your Help!” *Uber Newsroom*. Retrieved from: <http://newsroom.uber.com/2012/11/helpubervan>

[14] CBC News. (2014, October 14). “Uber Vancouver hiring fair goes on despite moratorium.” *CBC News*. Retrieved from: <http://www.cbc.ca/news/canada/british-columbia/uber-vancouver-hiring-fair-goes-on-despite-moratorium-1.2798663>

[15] The Canadian Press. (2014, November 3). “Uber Vancouver to get undercover government checks to enforce taxi regulations.” *CBC News*. Retrieved from: <http://www.cbc.ca/news/canada/british-columbia/uber-vancouver-to-get-undercover-government-checks-to-enforce-taxi-regulations-1.2821811>

[16] Uber. (2014). “Vancouver Needs Uber!” *Uber Action*. Retrieved from: <https://action.uber.org/vancouver>

[17] Uber. (2014, July 17). “Welcome Us Back...But Only For Ice Cream Day.” *Uber Newsroom*. Retrieved from: <http://newsroom.uber.com/vancouver-ca/2014/07/welcome-us-back-but-only-for-ice-cream-day>

Uber. (2014, August 12). “The Pupdate Is In, Vancouver!” *Uber Newsroom*. Retrieved from: <http://newsroom.uber.com/vancouver-ca/2015/08/the-pupdate-is-in-vancouver>

Table 5. Estimated fare comparison between taxi and Uber services in Vancouver.

Service	Base Fare	Per Kilometre	Per Minute	Total Fare
uberX	\$2.50	\$0.80	\$0.18	\$11.18
Taxi	\$3.20	\$1.84	\$0.55	\$15.61
uberXL	\$2.50	\$1.55	\$0.35	\$19.34
UberBLACK	\$8.00	\$2.70	\$0.50	\$29.36
UberSUV	\$15.00	\$2.80	\$0.60	\$37.64

Note: Fare is calculated for a single 6.8 kilometre trip using 12 minutes driving time and 6 minutes idling time, representing a typical short city trip in Vancouver (e.g., from Canada Place to Oakridge Centre).

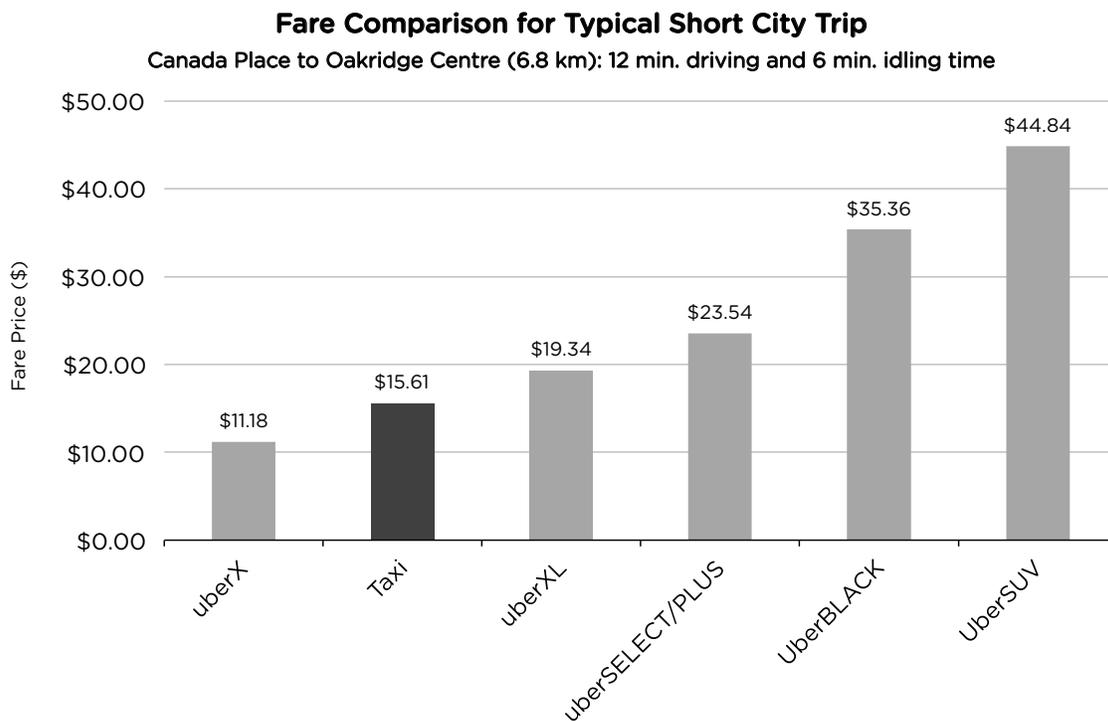


Figure 8. Estimated fare comparison between taxi and Uber services in Vancouver.

Uber services are estimated using a typical short city trip in Vancouver, e.g., from Canada Place to Oakridge Centre (see **TABLE 5** and **FIGURE 8**). The fare is calculated for a single 6.8 kilometre trip using 12 minutes driving time and 6 minutes idling time.

Uber trips are calculated using fares in Toronto as a comparable proxy. In reality, Uber’s fare structure would likely differ in Vancouver. The company has stated they would likely set their pricing structure to be competitive with Car2Go in Vancouver.

4.0 | REVIEW OF UBER IN VANCOUVER

For the typical trip, an estimated uberX fare costs \$11.18 compared to an estimated taxi fare at \$15.61 for a difference of -\$4.43 (39.6% difference).

4.4 STATUS OF WORK CONDUCTED

All the Metro Vancouver member municipalities, TransLink, and Metro Vancouver were contacted in order to ascertain the status of work conducted on ridesourcing/ridesharing and Uber (see **TABLE 6**).

Table 6. Inventory of work conducted on Uber by Metro Vancouver municipalities and agencies.

Municipality/Agency	Contacted by Uber?	Previous Work Conducted on Uber?	Future Work to be Conducted on Uber?
Metro Vancouver	Unknown	Unknown	Unknown
TransLink	Yes	Yes	Yes
Burnaby	Yes	Yes	Yes
Coquitlam City	No	No	No
Coquitlam Port	No	No	No
Delta	No	No	No
Electoral Area A - UBC	No	No	No
Electoral Area A - AMS*	Yes	No	Yes
Langley City	No	No	No
Langley Township	No	No	No
Maple Ridge	No	No	No
New Westminster	No	Yes	Yes
North Vancouver City	Yes	No	No
North Vancouver District	No	Yes	Maybe
Pitt Meadows	No	No	No
Richmond	No	No	No
Surrey	Unknown	Unknown	Unknown
Vancouver	Yes	Yes	Yes
West Vancouver	No	No	No
White Rock	No	No	No

Note: Does not include the Village of Anmore and the Village of Belcarra.
 * Alma Mater Society of UBC Vancouver.

5.0 REVIEW OF PUBLIC OPINION

5.1 TWITTER

On Uber Vancouver’s petition website, more than 40,000 signatures have been received as of September 2015. Uber Vancouver’s Twitter account is also quite active, with daily interactions with Vancouver-based Twitter users.^[18]

5.2 CITY 3-1-1 CASES

In total, 22 comments regarding Uber were received by the City’s 3-1-1 service from March 2014 to August 2015.

- 45% (10 comments) of comments cited poor service from Vancouver taxi companies (e.g., long wait times, poor vehicle condition) as a reason to permit Uber to operate in Vancouver to allow for more competition in the passenger transportation industry;
- 36% (8) of comments cited a positive experience with Uber in other jurisdictions;
- 14% (3) of comments cited environmental sustainability benefits (e.g., reduced congestion) if Uber were to operate in Vancouver;
- 4% (1) of comments cited accessibility concerns regarding Uber; and
- 4% (1) of comments cited concerns regarding overregulation of the taxi industry in comparison to Uber.

Overall, 77% (17) of comments expressed a positive sentiment regarding Uber, whereas 18% (4) of comments expressed a negative or neutral sentiment regarding Uber. See **APPENDIX B: CITY 3-1-1 CASES** for a complete list of the comments.

[18] An analysis of Uber Vancouver’s Twitter account to determine the overall sentiment of interactions with Twitter users was outside the scope of the GCS research project.

5.3 MARKET RESEARCH

5.3.1 Vancouver

There is no known and publicly accessible market research of Uber among Vancouver residents currently available. Insights West conducted one survey, “Metro Vancouver Attitudes to Transportation Options,” in December 2014 on behalf of Ripe Rides, a new mid-level luxury sedan-for-hire service in BC that uses a digital smartphone app.^[19] Their research indicated that there is demand for more transportation options in Vancouver:

- The majority (60%) of respondents were in support of a new, affordable sedan-style car service that would meet BC regulations.
- 66% of respondents indicated that the new service would be their preferred mode of transportation over other modes, including taxis, when celebrating special occasions.
- 68% of respondents were not in support of introducing an unregulated ridesourcing/ridesharing service.

The survey sample consisted of 795 adult residents living in the Vancouver region, including 401 frequent taxi and/or limo riders.

5.3.2 Other Canadian Jurisdictions

Market research has been conducted in other jurisdictions, including Toronto, Montreal, Ottawa, Edmonton, Quebec City, and London.^[20]

Overall, Uber finds the most support in larger jurisdictions where Uber has established itself relative to a recent entry into a new market, and among younger people from 18 to 34 years old, and those 35 to 49 years old. The majority of respondents believe that Uber should

[19] Insights West. (2014, December 22). “Two thirds of residents believe Metro Vancouver is not a leader in offering transportation choices.” *Insights West*. Retrieved from: <http://www.insightswest.com/news/two-thirds-of-residents-believe-metro-vancouver-is-not-a-leader-in-offering-transportation-choices>

[20] Mainstreet Research. (2015, August 21). “Support for Uber fluid across Canada.” *Mainstreet Research*. Retrieved from: <http://www.mainstreetresearch.ca/support-for-uber-fluid-across-canada>

5.0 | REVIEW OF PUBLIC OPINION

be regulated and operating with the same regulations as taxis, and they generally find taxis to be safer than Uber.

Toronto, ON

- Almost half (45%) of respondents are in support of Uber, while one-third (37%) of respondents are in support of banning Uber.
- Two-thirds (63%) of respondents think Uber should be operating with the same regulations as taxis, with 38% favouring a compromise between Uber and the taxi industry to reach a solution.
- 48% of respondents consider Uber to be safe, whereas 85% consider taxis to be safe.

Montreal, QC (Mainstreet/Postmedia Poll)

- Almost half (46%) of respondents are in support of Uber, while one-third (38%) of respondents are in support of banning Uber.
- Two-thirds (63%) of respondents think Uber should be operating with the same regulations as taxis, with 36% favouring a compromise between Uber and the taxi industry to reach a solution.
- 47% of respondents consider Uber to be safe, whereas 86% consider taxis to be safe.

Montreal, QC (Leger Poll)⁴

- The vast majority (85%) of respondents have heard of Uber.
- Three-quarters (75%) of respondents have a positive opinion of sharing economy services, such as Uber.
- Almost three-quarters of respondents agree that the provincial government (74%) and the municipal government (73%) should develop regulations that accommodate new sharing economy services, including uberX.
- Two-thirds (68%) of respondents do not support the City of Montreal's action on towing/impounding uberX vehicles, and the majority (53%) of Montreal residents think uberX should not be illegal.

Ottawa, ON

- More than one-third (36%) of respondents are in support of Uber, while 40% of respondents are in support of banning Uber.
- More than half (58%) of respondents think Uber should be operating with the same regulations as taxis, with 34% favouring a compromise between Uber and the taxi industry to reach a solution.
- Half (50%) of respondents consider Uber to be safe—the highest in Canada, while the vast majority of (88%) consider taxis to be safe.

Edmonton, AB

- More than one-third (36%) of respondents are in support of Uber, while 41% of respondents are in support of banning Uber.
- Two-thirds (66%) of respondents think Uber should be operating with the same regulations as taxis, with 38% favouring a compromise between Uber and the taxi industry to reach a solution.
- Almost half (43%) of respondents consider Uber to be safe, while the vast majority (84%) consider taxis to be safe.

Quebec City, QC

- One-third (32%) of respondents are in support of Uber, while 43% of respondents are in support of banning Uber.
- One-third (35%) of respondents think Uber should be operating with the same regulations as taxis, with 60% favouring a compromise between Uber and the taxi industry to reach a solution.
- Almost half (43%) of respondents consider Uber to be safe, while the vast majority of (86%) consider taxis to be safe.

[21] Leger. (2015). *Montrealer Support Survey*. Montreal: Uber Canada. Retrieved from: https://image.et.uber.com/lib/fe94127371650c7974/m/2/Uber_Leger_Poll_En.pdf

London, ON

- Less than a quarter (23%) of respondents are in support of Uber, while almost 50% of respondents are in support of banning Uber.
- Two-thirds (64%) of respondents think Uber should be operating with the same regulations as taxis, with 34% favouring a compromise between Uber and the taxi industry to reach a solution.
- Slightly more than a quarter (29%) of respondents consider Uber to be safe, while the vast majority of (85%) consider taxis to be safe.

5.4 SUMMARY

Based on the Insights West survey, market research in other jurisdictions, 3-1-1 cases, Uber Vancouver's petition, and the author's general experience, it is predicted that Uber has a moderate to potentially high support among Vancouver residents.

6.0 | REVIEW OF IMPACTS

6.0 REVIEW OF IMPACTS

This section provides an overview of the impacts of Uber based on available research and data, including impacts on the taxi industry, service, the environment, transit, and driving behaviour.

6.1 STATUS OF LITERATURE

In general, there has been limited peer reviewed, scholarly literature available regarding the impacts of Uber. In particular, empirical studies are very limited. This makes it difficult to develop informed policy decisions. **TABLE 7** shows the number of publications that were identified in the literature review as of August 2015. Grey literature regarding Uber mainly includes publications from research think tanks, law firms, and insurance associations. Media-related publications form the largest share of documents, as media coverage on Uber is prolific with a number of news articles published on a weekly basis around the world.

Table 7. Number of publications identified in literature review.

Category	Discipline or Topic	# Publications
Scholarly publications*	Economics	5
	Computer science	4
	Transportation	2
	Anthropology	1
	Business	1
	Communications	1
Legal publications**	Regulations	6
	Insurance	3
	Tax	2
	Environment	1
Academic institutions***	General	3
	Law	3
	Transportation	2

* Includes publications in peer-reviewed journals, conference articles, and student theses and dissertations.

** Includes white papers and unpublished manuscripts.

*** Includes legal essays and commentary.

6.2 IMPACT: TAXI INDUSTRY

6.2.1 Market Share and Medallion Value

Based on available research and data, ridesourcing has an overall negative economic impact on the taxi industry as it shares a similar market demand as taxis. The growth of Uber has primarily originated from the substitution of taxi trips and some induced demand.

Overall, there has been a 10% to 40% reported reduction in taxi market share, with a commensurate loss in medallion/license value. Uber has denied these numbers and instead argued their impact on the taxi industry has been overstated. Furthermore, the company questions the time horizon of analysis when considering the impact to taxi market share.

United States

- One study estimated a general 10-25% reduction of taxi trips within two to three years of a TNC entry to a market.^[22]
- Certify, a travel/expense management software, found that among business travelers:^[23]
 - › Q1-Q2 2015: Uber had a market share of 55% compared to taxis at 43%.
 - › From Q2 2014 to Q2 2015, Uber's market share increased from 8% in 2014 to 31% in 2015. During this same period, taxi trips declined from 37% to 24%.

Boston, MA

- The Boston Taxi Drivers Association estimated business was down about 35-40%.^[24]

[22] Teal, R. (n.d.). *Economic impacts of app development and control*. Larne: Taxi Research Partners. Retrieved from: http://www.taxiresearch.org/Taxi_Research_Partners/Blank_files/Economic%20Impacts%20of%20App%20Development%20and%20Control.pdf

[23] Certify. (2015). *Sharing the Road: Uber on the Rise Nationwide*. Portland: Certify. Retrieved from: http://ma.certify.com/1/16202/2015-07-16/y11qh/16202/90210/Sharing_Economy_Q2_Report.pdf

[24] Powers, M. (2014, May 22). "Taxi drivers say Uber threatens their livelihoods." *Boston Globe*. Retrieved from: <https://www.bostonglobe.com/metro/2014/05/22/taxi-drivers-protest-uber-boston-offices/OYIRN0hHAHVhcxFIQ2X5al/story.html>

New York City, NY

- The NYC Taxi and Limousine Commission saw a decline of 15.5% of taxi trips (April 2012 to April 2015), which the Commission partially attributed to the growth of ridesourcing companies.^[25]
- Analysis of data released by the NYC Taxi and Limousine Commission for June 2013 to June 2015 found (see **FIGURE 9**):^[26]
 - › New York CBD: in terms of growth of total Uber trips, 13% of trips were induced while 87% were taxi substituted trips.
 - › Outside CBD: in terms of growth of total Uber trips, 80% of trips were induced while 20% were taxi substituted trips.
 - › Late-night (11 pm to 5 am) taxi trips declined 22% compared to 12% for other times of the day.
- Estimated statistics from June 2014 to June 2015 based on data from the NYC Taxi and Limousine Commission found a 10% decline in taxi trips and 7% decline in revenue.^[27]
- One commentator noted that any analysis should take into account mode share shifts from bus, walking, and bike-sharing when analyzing trip substitution with taxis.^[28]
- A transportation blogger who conducts transportation modeling work used an assumption of a 25% taxi substitution rate.^[29]
- The value of a taxi medallion has dropped from an average of \$1 million to \$690,000 from 2014 to June 2015.^[30]

[25] Harshbarger, R. (2015, July 10). "Yellow cab trips declining in NYC, according to TLC data." *AM New York*. Retrieved from: <http://www.amny.com/transit/nyc-yellow-cab-trips-on-the-decline-uber-to-blame-1.10627001>

[26] The Economist. (2015, August 14). "Taxis v Uber: A tale of two cities." *The Economist*. Retrieved from: <http://www.economist.com/news/united-states/21661016-does-uber-substitute-cabs-or-attract-new-riders-it-depends-where-you-live-tale>

[27] Hicks, N. & Rivoli, D. (2015, August 16). "Taxi pickups plummet 10% to 77 million in first half of 2015: analysis." *NY Daily News*. Retrieved from: <http://www.nydailynews.com/new-york/taxi-pickups-plummet-77-million-2015-analysis-article-1.2327367>

[28] Meyers, L. (2015, August 18). "Once again, NYC data shows resilience of taxi medallions." *Seeking Alpha*. Retrieved from: <http://seekingalpha.com/article/3448986-once-again-nyc-data-shows-resilience-of-taxi-medallions>

[29] Miller, S. (2015, July 22). "Uber's own numbers show it's making traffic worse." *StreetsBlog NYC*. Retrieved from: <http://www.streetsblog.org/2015/07/22/ubers-own-data-reveals-it-slows-manhattan-traffic-9-percent>

[30] The Economist. (2015, August 14). "Taxis v Uber: A tale of two cities." *The Economist*.

San Francisco, CA

- One study found a 39% substitution rate with taxi trips.^[31]
- The San Francisco Municipal Transportation Agency originally reported an estimated decline of 65% of trips taken by taxi from March 2012 to July 2014, but San Francisco taxi companies reported an actual decline of 20-30% of trips during the same period.^[32]

Seattle, WA^[33]

- Total fare revenue for the taxi industry declined 28% from \$100 million in 2012-13 to \$72 million in 2014.
- Total number of miles driven by taxi companies increased from 65.8 million miles to 67.3 million miles between 2012-13 to 2013-14. However, total revenue miles decreased 27% from 30 million miles to 21.9 million miles during the same period.

Washington, DC, US^[34]

- District Cab reported a 22% decline in credit card revenue, and a 20% decline in dispatch trips.
- Yellow Cab reported a 30% decline in dispatch and total overall trips.
- VIP Cab reported a 30% decline in business.
- In contrast to numbers provided by taxi companies, the DC Taxi Commission reported only a 10% decline of taxi trips.

Retrieved from: <http://www.economist.com/news/united-states/21661016-does-uber-substitute-cabs-or-attract-new-riders-it-depends-where-you-live-tale>;

The Economist. (2015, August 10). "Taxis v Uber: Substitutes or complements?" *The Economist*. Retrieved from: <http://www.economist.com/blogs/graphicdetail/2015/08/taxis-v-uber>

[31] Rayle, L., Shaheen, S., Chan, N., Dai, D., & Cervero, R. (2014). *App-based, on-demand ride services: Comparing taxi and ridesourcing trips and user characteristics in San Francisco*. Berkeley: University of California Transportation Center. Retrieved from: http://tsrc.berkeley.edu/sites/default/files/RidesourcingWhitePaper_Nov2014Update.pdf

[32] Kwong, J. (2014, November 17). "SF taxi decline debunked by cab companies." *SF Examiner*. Retrieved from: <http://archives.sfexaminer.com/sanfrancisco/sf-taxi-decline-debunked-by-cab-companies/Content?oid=291217>

[33] Soper, T. (2015, June 11). "The Uber effect: Seattle taxi industry revenue dipped 28% in past 2 years." *GeekWire*. Retrieved from: <http://www.geekwire.com/2015/the-uber-effect-seattle-taxi-industry-revenue-dipped-28-in-past-two-years>

[34] Caro, M.D. (2014, September 22). "D.C. cab companies blame steep declines in revenue on ridesharing." *WAMU 88.5*. Retrieved from: http://wamu.org/news/14/09/22/dc_cab_companies_pin_steep_declines_in_revenue_on_ridesharing

6.0 | REVIEW OF IMPACTS

Are Ubers Supplementing Or Replacing Cabs?

Change in number of Uber and taxi pickups by taxi zone, April-June 2014 versus April-June 2015

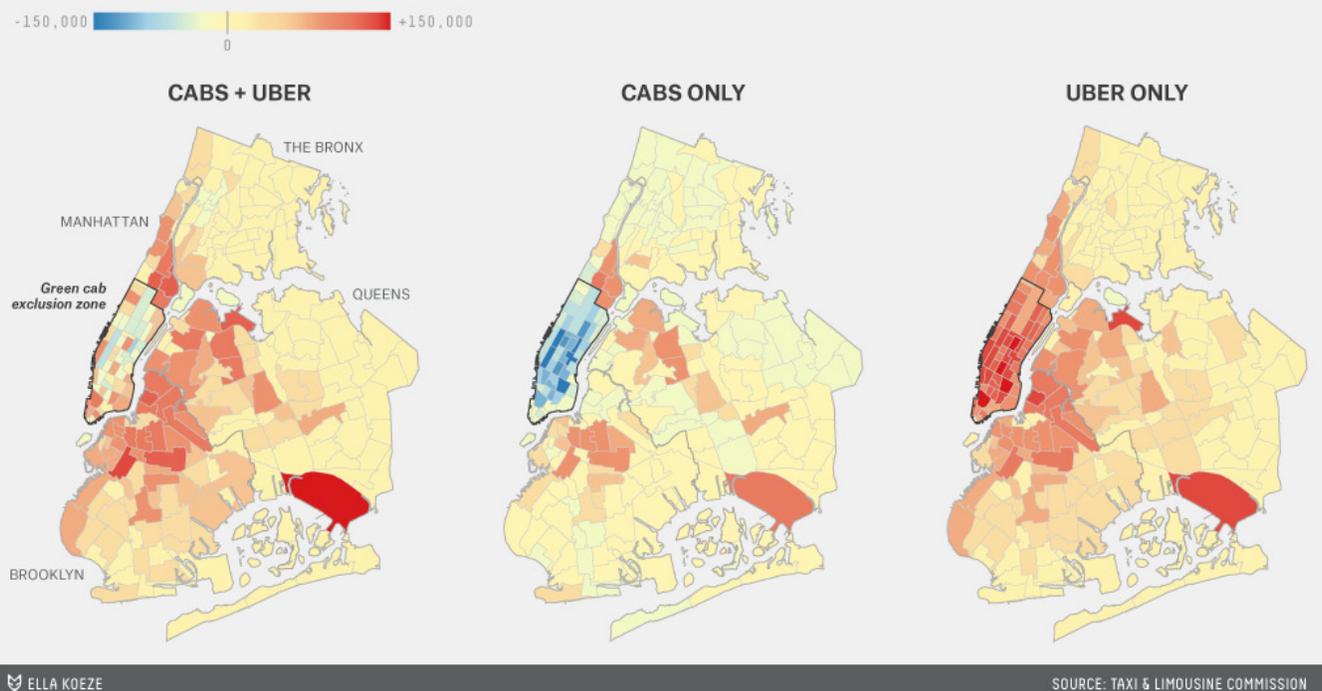


Figure 9. Seasonal change in number of Uber and taxi pickups in New York City from April-June 2014 to April-June 2015. Zones marked in blue experienced a net decrease in pickups, while red zones saw a net increase.^[35]

6.2.2 Employment and Income

United States

- The American Federation of Labor and Congress of Industrial Organizations noted that taxi drivers have reported a 30-50% reduction in income for 2014.^[36]

[35] Fischer-Baum, R., & Bialik, C. (2015, October 13). "Uber is taking millions of Manhattan rides away from taxis." *FiveThirtyEight*. Retrieved from: <http://fivethirtyeight.com/features/uber-is-taking-millions-of-manhattan-rides-away-from-taxis>

[36] Kwong, J. (2014, November 5). "SF cabdrivers officially join union, take aim at Uber, Lyft, Sidecar." *SF Examiner*. Retrieved from: <http://archives.sfexaminer.com/sanfrancisco/sf-cabdrivers-officially-join-union-take-aim-at-uber-lyft-sidecar/Content?oid=2911218>

- Following the 2008 recession, cities with TNCs showed slower growth in taxi driver employment as measured from 2007 to 2012.^[37]

Ottawa, ON

- Ottawa taxi drivers have reported a decline of 25-30% of their take-home pay.^[38]

[37] Wang, A. (2015). *The economic impact of transportation network companies on the taxi industry*. Unpublished undergraduate thesis. Claremont: Scripps College.

[38] Hurley, M. (2015, July 9). "Two more Uber drivers charged; total now stands at 37." *Ottawa Citizen*. Retrieved from: <http://ottawacitizen.com/news/local-news/two-more-uber-drivers-charged-total-now-stands-at-37>

San Francisco, CA

- The San Francisco Cab Drivers Association reported that over 3,000 drivers of its 8,500 drivers switched to driving for a company such as Uber in 2013.^[39]

6.3 IMPACT: SERVICE

Based on available research and data, Uber generally provides better service compared to traditional taxi companies with faster wait times, lower fares, better passenger experience, and wider service coverage for underserved populations and areas. That being said, there are concerns regarding the ability for Uber to successfully provide wheelchair accessible service.

United States

- Certify, an online travel and expense management software, found that business travelers rate Uber services (4.59 out of 5.00) higher than taxis (3.70 out of 5.00).^[40]

Chicago, IL and New York, NY

- One study found that the quality of taxi service (as measured by the number and type of complaints) improved through the introduction of Uber due to increased competition.^[41]

Los Angeles, CA

- A study sponsored by Uber found that uberX service in low-income areas was better than taxi, with taxi riders waiting twice as long and paying twice as much compared to a comparable uberX ride.^[42]

New York, NY

- One study found that ridesourcing services such as Uber provide residents in lower-income and minority neighbourhoods beyond the downtown core with more transportation choice and improved service.^[43]

San Francisco, CA

- The San Francisco Late Night Transportation Working Group found that ridesourcing services are quicker and more reliable during late night periods (9 pm to 5 am), which is important for late-night workers, residents, and visitors.^[44]
- One study found that Uber has an average wait time of 3.35 minutes, compared to 4.62 for a flag-down taxi (38% faster) and 9.39 minutes for a dispatch taxi (180% faster).^[45]
- The same study above also found that Uber services are generally available at all times of the day (100%), as determined by the ratio of total successful ride requests to total requests, compared to flag-down taxis (95%) and dispatch taxis (49%).

[39] Govern, D. (2014, January 16). "San Francisco taxi drivers migrate to rideshare services." *CBS SF Bay Area*. Retrieved from: <http://sanfrancisco.cbslocal.com/2014/01/16/san-francisco-cab-drivers-migrate-to-uber-other-car-services>

[40] Certify. (2015). *Sharing the Road: Uber on the Rise Nationwide*. Portland: Certify. Retrieved from: http://ma.certify.com/l/16202/2015-07-16/y11qh/16202/90210/Sharing_Economy_Q2_Report.pdf

[41] Wallsten, S. (2015). *The Competitive Effects of the Sharing Economy: How is Uber Changing Taxis?* Washington, DC: Technology Policy Institute. Retrieved from: https://www.techpolicyinstitute.org/files/wallsten_the%20competitive%20effects%20of%20uber.pdf

[42] Smart, R., Rowe, B., Hawken, A., Kleiman, M., Mladenovic, N., Gehred, P., & Manning C. (2015). *Faster and Cheaper: How Ride-Sourcing Fills a Gap in Low-Income Los Angeles Neighborhoods*. Los Angeles: BOTEC Analysis. Retrieved from: <http://botecanalysis.com/wp-content/uploads/2015/07/LATS-Final-Report.pdf>

[43] Meyer, J. (2015). *Uber-Positive: The Ride-Share Firm Expands Transportation Options in Low-Income New York*. New York: Manhattan Institute for Policy Research. Retrieved from: http://www.manhattan-institute.org/html/ib_38.htm

[44] NightlifeSF. (2015, February 23). *The Other 9-to-5: Improving Late-Night and Early-Morning Transportation for San Francisco Workers, Residents, and Visitors*. San Francisco: NightlifeSF. Retrieved from: <http://nightlifesf.org/the-other-9-to-5-improving-late-night-and-early-morning-transportation-for-san-francisco-workers-residents-and-visitors>

[45] Wang, A. (2015). *The economic impact of transportation network companies on the taxi industry*. Unpublished undergraduate thesis. Claremont: Scripps College.

6.0 | REVIEW OF IMPACTS

6.4 IMPACT: ENVIRONMENT

Based on current research, there is inconclusive evidence demonstrating whether ridesourcing has an overall positive or negative environmental impact as measured by vehicle kilometres travelled (VKT), traffic congestion, and greenhouse gas emissions.

United States

- KPMG predicts automobile ownership will continue to decline as ridesourcing services provide a compelling alternative to ownership.^[46]

New York, NY

- One transportation blogger analyzed Uber's data and found that Uber is reducing average travel speeds, and increasing overall congestion in Manhattan.^[47]

Portland, OR

- The City of Portland hypothesizes that more for-hire vehicles will increase congestion, but also improve general availability of parking. However, there is an unknown overall net environmental impact.^[48]

San Francisco, CA

- One study found that ridesourcing induced a small number of vehicle trips. However, ridesourcing users are also more likely to own fewer vehicles, which is associated with less vehicle miles travelled. 90% of survey respondents that were vehicle owners did not change ownership level, but 40% of survey respondents reported driving less since using ridesourcing.^[49]

[46] KPMG. (2014). *Me, my car, my life...in the ultraconnected age*. Amstelveen: KPMG. Retrieved from: <http://www.kpmg.com/Ca/en/IssuesAndInsights/ArticlesPublications/Documents/me-my-life-my-car.pdf>

[47] Miller, S. (2015, July 22). "Uber's own numbers show it's making traffic worse." *StreetsBlog NYC*. Retrieved from: <http://www.streetsblog.org/2015/07/22/ubers-own-data-reveals-it-slows-manchattan-traffic-9-percent>

[48] City of Portland. (2015). *Environmental Considerations: City of Portland Private For-Hire Transportation Innovation Task Force Subcommittee on Market and Program Considerations*. Portland: City of Portland. Retrieved from: <https://www.portlandoregon.gov/transportation/article/533860>

[49] Rayle, L., Shaheen, S., Chan, N., Dai, D., & Cervero, R. (2014). *App-based, on-demand*

- The same study above also found that the average occupancy for ridesourcing trips was 1.8 passengers compared to 1.1 passengers for taxis, suggesting ridesourcing trips are more efficient and reducing unnecessary travel.
- One study found that part-time and full-time ridesourcing drivers are likely to deadhead in order to pick-up passengers, thus increasing vehicle miles travelled and pollution.^[50]

6.5 IMPACT: PUBLIC TRANSPORTATION

Based on available research, Uber may be complementary with transit, supporting complete first and last mile trips. However, it should also be noted that research suggests that taxis are complementary to transit as well, functioning as an extension to the public transit network.^[51]

Portland, OR

- Uber claims that many trips take place within the city's transit area catchment areas. However, they have not released information regarding how many trips are deadhead trips, and how far drivers travelled between trips.^[52]

San Francisco, CA

- One study found that Uber both substitutes for and complements public transit. If Uber were not available, many ridesourcing users would have otherwise used transit for long trips.

ride services: Comparing taxi and ridesourcing trips and user characteristics in San Francisco. Berkeley: University of California Transportation Center. Retrieved from: <http://www.uctc.net/research/papers/UCTC-FR-2014-08.pdf>;

Shaheen, S. (2014). *Transportation network companies and ridesourcing: Comparing taxi and TNC/ridesourcing trips and user characteristics in San Francisco*. Berkeley: University of California Transportation Center. Retrieved from: http://www.cupuc.ca.gov/NR/rdonlyres/5C961222-B9C8-4E53-A54D-FC2A89C0A30C/0/RidesourcingCPUcShaheen_Final_v2.pdf

[50] Anderson, D.N. (2014). "Not just a taxi? For-profit ridesharing, driver strategies, and VMT." *Transportation*, 41: 1099-1117.

[51] King, D.A., Peters, J.R., & Daus, M.W. (2012). "Taxicabs for improved urban mobility: Are we missing an opportunity?" Paper presented at the Transportation Research Board 91st Annual Meeting, Washington, DC. Washington, DC: Transportation Research Board. Retrieved from: <http://trid.trb.org/view.aspx?id=1129618>

[52] Uber. (2015, March 26). "Uber and Portland Metro's Public Transportation Working Together." *Uber Newsroom*. Retrieved from: <https://newsroom.uber.com/oregon/2015/03/uber-and-portland-metros-public-transportation-working-together>

However, the study also noted that many trips began or ended at a transit stop. 4% of survey respondents reported they used Uber as public transit was unavailable in their area.^[53]

6.6 IMPACT: DRIVING BEHAVIOUR

Based on available research, Uber has a positive impact in reducing the number of incidents of driving under the influence. However, Uber may have a negative effect of increasing the risk of distracted driving.

6.6.1 Driving Under the Influence

United States

- Two studies found that the introduction of Uber has reduced incidents of driving under the influence (DUI) and motor vehicle homicides. The studies hypothesized that this was a result of: 1) cheaper fares, as the effect was only present for the uberX platform, and not UberBLACK; and 2) Uber's more attractive customer service. The effect is greatest in larger cities.^[54]
- One study found 20% of ridesourcing users avoided drinking and driving because of Uber.^[55]

[53] Rayle, L., Shaheen, S., Chan, N., Dai, D., & Cervero, R. (2014). *App-based, on-demand ride services: Comparing taxi and ridesourcing trips and user characteristics in San Francisco*. Berkeley: University of California Transportation Center. Retrieved from: <http://www.uctc.net/research/papers/UCTC-FR-2014-08.pdf>

[54] Greenwood, B.N., & Wattal, S. (2015). "Show me the way to go home: An empirical investigation of ride sharing and alcohol related motor vehicle homicide." Fox School of Business Research Paper No. 15-054. Retrieved from: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2557612;

Kalmbach, Z. (2015). *The effect of ridesharing services on drunk driving*. Unpublished undergraduate thesis. Texas: Texas A&M University. Retrieved from: <http://oaktrust.library.tamu.edu/handle/1969.1/154487>

[55] Rayle, L., Shaheen, S., Chan, N., Dai, D., & Cervero, R. (2014). *App-based, on-demand ride services: Comparing taxi and ridesourcing trips and user characteristics in San Francisco*. Berkeley: University of California Transportation Center. Retrieved from: <http://www.uctc.net/research/papers/UCTC-FR-2014-08.pdf>

6.6.2 Distracted Driving

United States

- There are no known scholarly or legal analyses of the potential of Uber increasing the number of incidents of distracted driving. However, there have been a few news articles and blog posts suggesting Uber may increase the risk of distracted driving, as drivers may be interacting with the Uber app while operating a motor vehicle.^[56]

[56] Richtel, M. (2014, December 21). "Distracted driving and the risks of ride-hailing services like Uber." *The New York Times*. Retrieved from: <http://bits.blogs.nytimes.com/2014/12/21/distracted-driving-and-the-risks-of-ride-hailing-services-like-uber>

7.0 | REVIEW OF REGULATIONS AND POLICIES

7.0 REVIEW OF REGULATIONS AND POLICIES

This section provides a review of regulations and policies that represent key issues the City of Vancouver and other jurisdictions should consider when developing a regulatory framework for ridesourcing.

7.1 SAFETY

Regulations for driver safety for ridesourcing companies are generally similar to those required for taxi companies.

The most significant difference from taxi-related regulation is that Uber has generally been resistant to regulations requiring Uber drivers to go through the jurisdiction's method of background checks, such as the local police station. Instead, Uber has been insistent that drivers should go through the company's own third-party electronic background check. Uber's reliance on their own system has been a source of contention, as critics argue the company's screening process is inadequate. For example, in a lawsuit filed against Uber in California, taxi companies noted that Uber's background check do not require fingerprinting scans.^[57] Uber responded that their system is adequate.^[58]

Acknowledging Uber's requirements, the City of Columbus, OH successfully created additional safety measures on top of Uber's third-party background check. For example, drivers are required to obtain a P2P Transportation Network Drivers license and complete an additional fingerprint background check at the City's licensing office before they can operate a vehicle.^[59]

In the Region of Waterloo, ON, the Region has proposed that Uber vehicles must have closed-circuit cameras and GPS tracking installed, and require drivers to take sexual assault prevention training.

[57] Lien, T. (2015, March 18). "California taxis sue Uber, allege false advertising, unfair competition." *Los Angeles Times*. Retrieved from: <http://www.latimes.com/business/technology/la-fi-tn-taxi-uber-unfair-competition-lawsuit-20150318-story.html>

[58] Uber. (2015, July 15). "Details on Safety." *Uber Newsroom*. Retrieved from: <https://newsroom.uber.com/2015/07/details-on-safety>

[59] Uber. (2015). "Columbus uberX." *Uber*. Retrieved from: <http://drive.uber.com/oh/cities/columbus/p2p>

7.2 DRIVER TRAINING

Regulations for driver training programs for ridesourcing companies are generally similar to those required for taxi companies.

For example, in the City of Seattle, WA, TNCs (along with taxi and other for-hire vehicle companies) are required to administer driver training programs.^[60] The training programs must include the following:

- Information about defensive driving;
- Instruction on use of emergency equipment and procedures for driver safety;
- Information about risk factors for crimes against drivers;
- Training in passenger relations; and
- Information about standards of professional conduct.

In addition, drivers must pass an examination, which may be administered by the City of Seattle, by the City jointly with King County, or by an approved taxicab association, for-hire vehicle company, transportation network company, or third-party vendor. The exams must test for the following:

- Knowledge of requirements and laws for operating taxicabs, for-hire vehicles or transportation network company vehicles;
- Ability to speak and read English well enough to fulfill the duties of a driver;
- Knowledge of vehicle safety requirements;
- Knowledge of the geography;
- Knowledge of local public and tourist destinations and attractions; and
- Knowledge of risk factors for crimes against drivers, of emergency procedures and of personal safety equipment.

[60] City of Seattle. (n.d.). "TNC drivers." *City of Seattle*. Retrieved from: <http://www.seattle.gov/business-regulations/taxis-for-hires-and-tncs/transportation-network-companies/tnc-drivers>

7.3 ACCESSIBILITY

Accessibility has been one area of concern that has been more difficult to address through regulation. Uber’s business model inherently makes it difficult to ensure accessible vehicles are available to accommodate seniors or persons with disabilities. One significant concern from regulators and the disability community is that Uber’s economic impact may undermine the taxi industry’s business viability, and in turn produce a shortage of accessible taxi vehicles.

In most jurisdictions, ridesourcing companies are required to provide passengers with the ability to indicate whether they require a wheelchair accessible vehicle. Uber’s typical strategy has been to use their UberACCESS/uberWAV or uberASSIST service to serve the disability community:

- **UberACCESS/uberWAV:** Uber partners with a wheelchair accessible transportation provider to ensure passengers have access to wheelchair accessible vehicles.
- **uberASSIST:** Uber drivers receive additional training that allow them assist members of the senior and disability communities. Drivers have vehicles that can accommodate folding wheelchair, walkers, and scooters, but do not have accessible ramps.

In the City of Chicago, IL and the City of Houston, TX, Uber has partnered with Opens Doors Organization, a non-profit organization that provides disability-related customer service training. In the City of New York, NY, the NYC Taxi & Limousine Commission has partnered with Uber to provide Uber with access to their Boro Taxis (Street Hail Livery program) that serve areas of New York that are not commonly served by the standard yellow medallion cabs.

Houston, TX has also established in their TNC ordinance an accessible fleet requirement goal for the City to meet. The City must have 3% of the entire vehicle for hire fleet (including taxicabs, limousines, TNCs, etc.) by 2015, increasing to 5% of the fleet by 2017. Incentives provided to transportation companies include relaxations for

vehicle age limits.^[61]

The City of Portland, OR has developed very comprehensive regulations around accessibility. For example, the City has required that all TNCs and taxis must provide accessible service 24/7, either with their own vehicles or by contracting. There were initial concerns with the lack of wheelchair accessible vehicles. For example, an Uber customer may request a wheelchair-accessible vehicle on the uberWAV service, but the app would report “No WAV cars available.”^[62] However, the lack of vehicles does not appear to be a significant concern anymore as of August 2015 according to a meeting with the City of Portland (see **APPENDIX A: MEETING RECORDS**).

Portland has also established performance standards for wheelchair accessible service, requiring that the average response time for accessible service requests must meet a certain baseline (e.g., a certain number of minutes or less) 95% of the time. Other innovative features include prohibition of surge pricing for all accessible service, and a program to encourage employment of persons with disabilities in the vehicle for hire industry.^[63]

In the State of California, TNCs are required to submit an Accessibility Plan and a Plan on Avoiding Divide between Able and Disabled Communities. The Accessibility Plan must contain the following:^[64]

- A timeline for modifying apps so that they allow passengers to indicate their access needs, including but not limited to the need for a wheelchair accessible vehicle. A passenger should be allowed to state other access needs, either from a drop-down menu with room

[61] City of Houston. (2014). *FAQ: Chapter 46 Related to Vehicles-for-Hire Amendments Approved 8/6/2014*. Houston: City of Houston. Retrieved from: https://www.houstontx.gov/ara/chapter46docs/vehicle_for_hire-faqs.pdf

[62] Templeton, A. & Rosman, J. (2015, May 18). “Uber’s wheelchair-accessible option in Portland doesn’t work 9-5.” *OPB*. Retrieved from: <http://www.opb.org/news/article/ubers-wheelchair-accessible-option-in-portland-doesnt-work-9-to-5>

[63] City of Portland. (2015). *Private For-Hire Transportation Innovation Task Force recommendations on taxis and TNCs*. Portland: City of Portland. Retrieved from: <https://www.portlandoregon.gov/transportation/article/540543>

[64] California Public Utilities Commission. (2014). “Required Reports TNCs Must Provide the CPUC.” *California Public Utilities Commission*. Retrieved from: <http://www.cpuc.ca.gov/PUC/Enforcement/TNC/TNC+Required+Reports.htm>

7.0 | REVIEW OF REGULATIONS AND POLICIES

for comments or through a field requesting information;

- A plan for how the TNC will work to provide appropriate vehicles for passengers who specify access needs, including but not limited to a plan to provide incentive to individuals with accessible vehicles to become TNC drivers;
- A timeline for modifying apps and TNC websites so that they meet accessibility standards. The relevant standard for web access is WCAG 2.0 AA;
- A timeline for modifying apps so that they allow passengers to indicate that they are accompanied by a service animal, and for adopting a policy that service animals will be accommodated; and
- A plan for ensuring that drivers' review of customers will not be used in a manner that results in discrimination, including any policies that will be adopted and any monitoring that will take place by the TNC to enforce this requirement.

To further incentivize drivers and ensure an adequate accessible vehicle supply in the US, other TNCs such as Tickengo (Wingz) and InstantCab have considered offering higher pay to drivers with accessible vehicles or cutting commission for drivers.^[65]

A few jurisdictions have required Uber to add a fee to every trip that is dedicated towards an accessibility fund. The purpose of the fund is to increase wheelchair accessible options for passengers who require assistance. See **SECTION 9.0: RIDESHARING TRANSPORTATION IMPACT FUND** for more information.

7.4 ENVIRONMENT

Based on available research, there is inconclusive evidence demonstrating whether ridesourcing has an overall positive or negative environmental impact. Furthermore, jurisdictions have yet to fully realize the

[65] Brooks, J. (2014, February 17). "UberX and Lyft disability access plans not wowing advocates." *KQED News*. Retrieved from: <http://ww2.kqed.org/news/2014/02/17/lyft-uber-disabled>

benefits of Uber and mitigate the disbenefits through transportation planning efforts. In the taxi industry, imposing vehicle standards such as low emission and fuel-efficient fleet requirements are a typical way for jurisdictions to reduce the environmental impact of the taxi travel.

During the State of California's 2013 rulemaking process for the TNC category, the San Francisco Municipal Transportation Agency noted several concerns they had regarding the environmental impacts of ridesourcing:^[66]

- The City of San Francisco has local goals for reducing greenhouse gas emissions, and has set requirements for low emission vehicle fleets for taxi providers.
- Ridesharing/ridesourcing currently lack vehicle emissions requirements.
- Ridesharing/ridesourcing will likely generate additional vehicle trips that contribute to congestion and energy consumption, and thus undermine local environmental goals.
- If ridesharing/ridesourcing drives regulated taxi providers out of business, this will further weaken the effectiveness of San Francisco's environmental policy.

One legal essay has recommended that jurisdictions pursue a TNC-specific regulatory category in order to maximize the potential environmental benefits of ridesourcing, as regulators can design regulatory tools specific to the ridesourcing industry.^[67] Potential policies jurisdictions can use to address the environmental impacts of ridesourcing include implementing:

- Vehicle, model year, or engine year restrictions;
- Minimum fuel efficiency standards;
- General anti-idling requirements; and
- Data reporting and sharing requirements for monitoring and evaluation.

[66] California Public Utilities Commission. (2013). *Reply comments to the order instituting rulemaking filed on behalf of the San Francisco Municipal Transportation Agency*. San Francisco: California Public Utilities Commission. Retrieved from: <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M042/K156/42156522.pdf>

[67] Strong, C.K. (2015). "When apps pollute: Regulating transportation network companies to maximize environmental benefits." *University of Colorado Law Review*, 86(1): 1049-1093.

Uber accepts drivers with vehicles that have a model year of 2000 or newer, but some jurisdictions have set additional requirements for 2001, 2005, 2007, and 2009 model years. For example, the New York Taxi and Limousine Commission requires vehicles to be a model year of 2011 or newer.^[68]

Implementing data sharing agreements and reporting requirements will also be important in maximizing the environmental benefits of ridesourcing (see **SECTION 7.5: DATA SHARING** for more information). In the State of California, TNCs must submit reports that include details on service provided by zip code, and the number of hours and distance logged by drivers. One legal essay noted several ways in which California's data requirements could be better improved to support environmental goals, including requiring TNCs to submit:

- Information on model year of vehicles;
- Information on fuel efficiency of vehicles; and
- Actual route travelled by vehicles.

Particularly with respect to data on actual route travelled, this allow jurisdictions to know:

- If TNCs indeed support the “last mile” of a trip;
- The extent to which they replace trips that could otherwise have been on transit; and
- Identify complementary opportunities with transit.

7.5 DATA SHARING

In some jurisdictions, Uber has agreed to enter into data sharing agreements to support policy and planning (see **APPENDIX G: EXAMPLE DATA SHARING AGREEMENTS**). For example, in the City of Boston, MA, Uber is providing Boston with anonymized trip-level data by ZIP Code Tabulation Area (ZCTA), the US Census's geographical representation of zip codes.^[69] Data from Uber includes:

- Timestamp including the date & time for the beginning of a trip;
- ZCTA in which trip began (pick-up);
- ZCTA in which trip ended (drop-off);
- Distance traveled during trip, in miles;
- Duration of trip, in seconds; and
- Technical support to interpret and utilize the data.

The City of Boston created a Taxi Advisory Committee, with TNCs as a committee member, to oversee the development of ridesourcing regulation. As part of this work, Boston indicated that the City's Transportation Department, the Department of Neighborhood Development, and the Boston Redevelopment Authority would receive access to Uber's data to support planning work.^[70]

Uber has cited several benefits of data sharing for jurisdictions, including:

- Traffic planning;
- Congestion reduction;
- Flow of residents across the City;
- Impact of events, disasters and other activities on City transportation;
- Identification of zoning changes and needs;
- Creation or reduction of parking; and
- Facilitation of additional transportation solutions for marquee City initiatives.

Uber's data sharing agreements are relatively new, so their effectiveness have yet to be evaluated. However, Uber has had issues complying with other jurisdictions' reporting requirements. For example, in the State of California, Uber failed to submit mandatory data reports to the California Public Utilities Commission, citing issues with driver privacy. Uber subsequently received a \$7.3 million fine. Uber has stated they prefer not to provide authorities with information about drivers to protect privacy.

[68] Drive Uber NYC. (n.d.). “Vehicle requirements.” *Drive Uber NYC*. Retrieved from: <http://www.driveubernyc.com/cars>

[69] Uber. (2015, January 13). “Driving Solutions to Build Smarter Cities.” *Uber Newsroom*. Retrieved from: <https://newsroom.uber.com/boston/2015/01/driving-solutions-to-build-smarter-cities>

[70] Dungca, N. (2015, January 13). “In first, Uber to share ride data with Boston.” *Boston Globe*. Retrieved from: <https://www.bostonglobe.com/business/2015/01/13/uber-share-ridership-data-with-boston/4K1o4OKZREtQ7jkoaZjoNN/story.html>

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7.6 INSURANCE

Regulation has typically defined three to four distinct time periods of ridesourcing activity provision, which has implications for insurance coverage and liability.

- **Period 0:** the driver is currently operating the vehicle, but is not currently logged onto and using the Uber app, i.e. non-ridesourcing, regular driving activity;
- **Period 1:** the driver is logged onto the Uber app and is available to seek fares, but has not yet accepted a ride request;
- **Period 2:** the driver has been matched with a passenger and has accepted the ride request, and is currently en route to pick up the passenger; and
- **Period 3:** the driver has picked up the passenger and is fulfilling the ride request.

In the United States, when the State of California first developed their TNC regulation, the act of providing ridesourcing services was inadequately defined—simply as “providing TNC services.” It was not until the regulation was in effect that it became evident Period 2 was problematic from an insurance perspective. Personal auto insurance policies bar coverage when an insured driver uses their vehicle for commercial uses, including transporting passengers for hire. This created an insurance gap where drivers and third-party victims were exposed and did not have coverage, as personal insurers would deny claims once the investigation found that the driver was using the Uber app.^[71]

Jurisdictions have since required TNCs to provide coverage for this period. For example, the State of California revised their regulations to explicitly account for this, defining three periods:

- **Period 1:** App open – waiting for a match
 - › Primary commercial insurance: death and personal injury per person = at least \$50,000; death and personal injury per

[71] Rassman, C.L. (2014). “Regulating rideshare without stifling innovation: Examining the drivers, the insurance ‘gap,’ and why Pennsylvania should get on board.” *Journal of Technology Law & Policy*, 15(1): 81-100.

incident = \$100,000; property damage = \$30,000; Excess coverage: at least \$200,000

- **Period 2:** Match accepted – but passenger not yet picked up (i.e. driver is on his/her way to pick up the passenger)
 - › Primary commercial insurance: \$1,000,000
- **Period 3:** Passenger in the vehicle and until the passenger exits the vehicle
 - › Primary commercial insurance: \$1,000,000; uninsured motorist coverage and underinsured motorist coverage = \$1,000,000

Despite these regulatory developments for insurance, insurance companies continue to warn drivers and consumers about the insurance risks and the need for full coverage.

In Canada, Uber claims that drivers are backed by \$5 million of contingent auto liability insurance covering bodily injury and property damage across all service periods. In other words, if the driver’s personal insurance would deny a claim, Uber’s contingent insurance would drop down to cover the claim.

Similar to the US, in Canada, personal insurance policies typically do not cover commercial activity. There have been media reports where drivers were not properly informed regarding their insurance coverage, and have yet to receive a payout from Uber’s insurance provider when they have been in an accident.^[72] The Canadian insurance industry has issued warning to drivers regarding the risks of being an Uber driver. For example, the Insurance Brokers Association of Ontario warned drivers that:

“At this time, drivers and passengers should know that there is no existing endorsement for a personal lines policy that is available today that would guarantee coverage or protection in the

[72] Owrap, K. (2015, August 25). “Drivers beware: UberX drivers may find themselves without insurance in the event of an accident.” *The National Post*. Retrieved from: <http://business.financialpost.com/news/transportation/driver-beware-uberx-drivers-may-find-themselves-without-insurance-in-the-event-of-an-accident>

event of a collision during an UberX experience ... If the driver is working under a standard/basic personal auto insurance policy and they have not informed their insurer or broker that they were using their vehicle for commercial purposes, coverage would likely not be extended. UberX drivers would be properly covered through the Facility Association under their taxi commercial auto policy. This is what is available for drivers today.”^[73]

Authorities have also issued warning, with the Province of Alberta warning passengers that:

“The Automobile Policy is not designed to provide insurance coverage when the vehicle is used as a taxi, ‘for hire’, or for compensation to transport passengers. The Automobile Policy excludes coverage if the insured vehicle is used to carry passengers for financial compensation. ... Ride sharing companies, such as Uber and others, may claim to have supplemental insurance, over and above the private vehicle insurance of their drivers, to cover liability and property damage in the event of a loss. The Superintendent of Insurance is of the view that Uber’s supplemental insurance does not currently meet the requirements of, nor is compliant with, Alberta’s Insurance Act and Regulations.”^[74]

In British Columbia, a BC personal injury law firm noted that ICBC would likely deny coverage for any insurance claims made from a crash while driving using the Uber app.^[75] Currently, ICBC requires drivers for hire using Uber to obtain, at minimum, a Class 4 commercial driver’s license and declare to their broker that they plan

to be a Uber driver.^[76]

In light of these concerns, the insurance industry is beginning to create new insurance products to cover ridesourcing/ridesharing. Uber recently announced a partnership with Intact Financial Corporation, a Canadian insurance company to develop a new insurance plan for the ridesharing/ridesourcing industry.^[77]

7.7 TRANSIT INTEGRATION

Some jurisdictions have partnered with Uber to integrate their ridesourcing service into their transportation services. Transportation agencies partner with Uber in an effort to provide an integrated multi-modal transportation solution, and assist passengers to complete first and last mile trips.

- **City of Rockford, IL: Rockford Mass Transit Distract (RMTD)**

While the City of Rockford is currently developing regulations for Uber as of June 2015,^[78] the City has considered pursuing a publicly funded partnership with Uber to help fill gaps in the city’s public transportation network. One idea was to redirect federal grants that were previously designated to help pay for bus passes to connect employees to employers, and instead use the money to fill in after-hour gaps or transport riders to places with poor bus service. This could be done in the form of paying for a person’s first six months of transportation on Uber, limited to routes that move them to and from work.^[79]

[73] Insurance Brokers Association of Ontario. (2015, August 13). “Ontario brokers urge caution when using ridesharing programs.” *Insurance Brokers Association*. Retrieved from: <http://www.ibao.org/ontario-brokers-urge-caution-when-using-ridesharing-programs>

[74] Alberta Treasury Board and Finance. (2015, July 27). *Caution regarding ride sharing services and insurance*. Edmonton: Alberta Treasury Board and Finance. Retrieved from: <http://www.finance.alberta.ca/publications/insurance/Superintendent-of-Insurance-Bulletin-02-2015.pdf>

[75] MacIssac & Company. (2014). “Uber ridesharing can lead to uber insurance problems.” *BC Injury Law*. Retrieved from: <http://bc-injury-law.com/blog/uber-ridesharing-lead-uber-insurance-problems>

[76] ICBC. (2015). “I want to use my vehicle to drive passengers for payment, for a service like Uber or Lyft. What kind of licence do I need?” *ICBC*. Retrieved from: <http://www.icbc.com/FAQ/Pages/Driver-licensing.aspx>

[77] Uber. (2015, September 8). “Intact Financial and Uber Working Together to Develop Innovative Ridesharing Insurance in Canada.” *Uber Newsroom*. Retrieved from: <http://newsroom.uber.com/toronto/2015/09/innovative-ridesharing-insurance>

[78] Klopff, R. (2015, June 18). “Rockford considers regulations and fees for ride-sharing services like Uber.” *WREX*. Retrieved from: <http://www.wrex.com/story/29357113/2015/06/18/rockford-considers-regulations-and-fees-for-ride-sharing-services-like-uber>

[79] Haas, K. (2014, November 14). “Uber could have public partnership in Rockford.” *Rockford Register Star*. Retrieved from: <http://www.rrstar.com/article/20141114/NEWS/141119606>

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- **City of Dallas, TX: Dallas Area Rapid Transit (DART)**^[80]

DART provides a smartphone app that includes a direct link to the Uber app (although not integrated into DART's app). The feature was included after a successful trial during a public celebration the City organized. This makes it easier for travellers who begin or end their trips in places that are not easily served by transit to quickly access Uber services.

- **City of Atlanta, GA: Metropolitan Atlanta Rapid Transit Authority (MARTA)**^[81]

MARTA partnered with Uber to offer first-time Uber passenger a \$20 discount as part of the MARTA's Last Mile Campaign (it should be noted that Uber offers similar discounts online). The program was aimed to encourage transit users to use Uber for the first and last miles of their trip.

- **City of Minneapolis, MN: Metro Transit & City of Los Angeles: Metro**^[82]

Uber is part of Metro Transit (Minneapolis) and Metro (Los Angeles)'s Guaranteed Ride Home program, a free program that allows people to get home from work/school if they have a family emergency. Passengers who use the program are provided with a reimbursement when they use Uber.

[80] Dallas Area Rapid Transit. (2015, April 14). "DART, Uber stepping up "complete trip" efforts." *DART*. Retrieved from: <http://www.dart.org/news/news.asp?ID=1179>

[81] Simmons, A. (2015, July 23). "MARTA pilots free Wi-Fi on buses and Uber partnership." *AJC*. Retrieved from: <http://commuting.blog.ajc.com/2015/07/23/marta-pilots-free-wi-fi-on-buses-and-uber-partnership>

[82] Metro Transit. (n.d.). "Guaranteed Ride Home." *Metro Transit*. Retrieved from: <http://www.metrotransit.org/guaranteed-ride-home>;

Metro. (n.d.). "Guaranteed Ride Home." *Metro*. Retrieved from: <http://www.metro.net/riding/rideshare/grh>

7.8 DRIVING BEHAVIOUR

Commentators have suggested Uber may increase the risk of distracted driving, as drivers may be interacting with the Uber app while operating a motor vehicle. Drivers would then be violating distracted driving laws.

^[83] For example, California state law states:^[84]

Hand-Held Wireless Telephone: Prohibited Use 23123.

(a) A person shall not drive a motor vehicle while using a wireless telephone unless that telephone is specifically designed and configured to allow hands-free listening and talking, and is used in that manner while driving.

Despite this law, there does not appear to be a definitive legal conclusion either in the courts or legal courts on whether Uber drivers are violating the law. As a result, the implication for BC's distracted driving law is unknown.

Under the BC Motor Vehicle Act, there is a complete ban on use of all electronic devices while driving or operating a motor vehicle:^[85]

Prohibition against use of electronic device while driving

214.2 (1) A person must not use an electronic device while driving or operating a motor vehicle on a highway.

(2) Without limiting subsection (1), a person must not communicate by means of an electronic device with another person or another device by electronic mail or other text-based message.

[83] Hurd, R.D. (2015, August 17). "Uber model leads to heightened risk of distracted driving." *The Legal Intelligencer*. Retrieved from: <http://www.thelegalintelligencer.com/id=1202734928114/Uber-Model-Leads-to-Heightened-Risk-of-Distracted-Driving?slreturn=20150915234603>

[84] California Department of Motor Vehicles. (2011). "Section 23123 Hand Held Wireless Telephone Prohibited Use" *California Department of Motor Vehicles*. Retrieved from: <https://www.dmv.ca.gov/portal/dmv/detail/pubs/vctop/vc/d11/c12/a1/23123>

[85] Province of BC. (2015). "Motor Vehicle Act (RSBC 1996) Chapter 318, Part 3.1 — Use of Electronic Devices while Driving." *BC Laws*. Retrieved from: [http://www.bclaws.ca/civix/document/LOC/complete/statreg/--%20M%20--/47_Motor%20Vehicle%20Act%20\[RSBC%201996\]%20c.%20318/00_Act/96318_06.xml#section214.1](http://www.bclaws.ca/civix/document/LOC/complete/statreg/--%20M%20--/47_Motor%20Vehicle%20Act%20[RSBC%201996]%20c.%20318/00_Act/96318_06.xml#section214.1)

Permitted use of electronic devices in BC require the use of hands-free communication.

New York City's proposed regulations include a section for how drivers should operate smartphone apps while driving. The regulation would electronically restrict Uber drivers from using their phone while driving.^[86]

The FHV Dispatch Application [Uber app] must be available to a Driver ONLY when the Vehicle is standing or stopped, except that an FHV Dispatch Application can permit a Driver to accept an E-Dispatch with a single touch using pre-programmed buttons or using voice activation while the vehicle is in motion. All other use of the FHV Dispatch Application must be velocity gated by the FHV Dispatch Application Provider to prevent its use while the vehicle is in motion.

[86] New York City Taxi and Limousine Commission. (2015). *Notice of Public Hearing and Opportunity to Comment on Proposed Rules*. New York: New York City Taxi and Limousine Commission. http://www.nyc.gov/html/tlc/downloads/pdf/proposed_rules_fhv_app_cert.pdf

8.0 | POLICY ANALYSIS AND OPTIONS

8.0 POLICY ANALYSIS AND OPTIONS

This section provides an overview of the four identified policy options the City of Vancouver can consider in response to the emerging ridesourcing industry. Ridesourcing companies operate in a variety of jurisdictions under a variety of regulatory frameworks.

8.1 OPTION 1: DO NOTHING

8.1.1 Overview

Description

The City can pursue **POLICY OPTION 1: Do NOTHING**. This would involve discontinuing any work as part of the Council Motion on improving vehicle for hire service and examining the potential of ridesourcing in Vancouver. This option poses the most regulatory, stakeholder, and financial risk, as it renders the City incapable to respond appropriately in the event that:

- The Passenger Transportation Board decides to regulate the ridesourcing industry;
- Uber chooses to begin illegal operations in Vancouver; and/or
- Internal or external changes, either unanticipated or predicted, occur that negatively affect the taxi industry.

Example Jurisdictions

- There are no known jurisdictions that have pursued this policy option where Uber is currently operating in, or have expressed intent to operate.

Example Practices

- None.

Strategic Considerations

- None.

8.1.2 SWOT Analysis

Strengths

- None.

Opportunities

- If the Province removes the City's jurisdiction over ridesourcing by amending *The Vancouver Charter*, staff time and resources are not wasted.

Weaknesses

- Public opinion towards the City may decline given generally positive sentiment towards Uber in Vancouver if this option prevents Uber from operating.
- The benefits of ridesourcing would be unrealized for Vancouver consumers.
- Creates uncertainty for stakeholders and potential business plans, including the taxi industry.
- Uber is a rapidly growing company; they are unlikely to cease operations and their desire to enter the Vancouver market.

Threats

- The Passenger Transportation Board may reverse their 2012 decision and choose to regulate the ridesourcing industry. As a result, the City would lack appropriate regulation for Uber at the municipal level.
- Uber has entered several new Canadian markets in 2015, and could reverse their position of working collaboratively with authorities in Vancouver.
- The taxi industry may respond with a lawsuit against the City in the event Uber begins to operate in Vancouver.

8.2 OPTION 2: PERMIT ENTRY WITH EXISTING “TAXICAB” CATEGORY

8.2.1 Overview

Description

The City can pursue **POLICY OPTION 2: PERMIT ENTRY WITH EXISTING “TAXICAB” CATEGORY** and regulate Uber as a taxi company, subject to existing taxi regulations. This policy option is what the Passenger Transportation Board and the City of Vancouver have adopted since 2012.

While the PTB and the City currently consider Uber as a taxi company, Uber has yet to formally apply for a taxi license. As Uber claims to not be a taxi company, this policy option has effectively kept Uber from operating in Vancouver. For this reason, this policy option has not been formally realized in Vancouver yet.

However, the continued use of this option poses risks and weaknesses given experiences in other jurisdictions. First, Uber has a history of disregarding local regulations and pursuing operations in jurisdictions. Specifically, Uber claims it is not a taxi company, but rather a technology company, and thus should be exempt from taxi regulations. Second, in the event that Uber agrees to be regulated as a taxi company, it may find the regulation too burdensome and leave the jurisdiction. While this protects the taxi industry and maintains the industry’s high standards, consumers in Vancouver ultimately cannot realize the benefits of Uber.

In places where Uber has decided to operate regardless of the existing regulation, jurisdictions have sought to ban Uber on the basis that the company is conducting illegal taxi operations. Most jurisdictions file a court injunction against Uber to shutdown their operations. In the Canadian context, the City of Toronto, ON and the City of Edmonton, AB were unsuccessful in their attempt to prevent Uber from operating when the courts overturned the ban. Uber’s continued operation despite attempts to ban the service has created a hostile environment between authorities, the taxi industry, and Uber, including:

- Enforcement, with charges against and/or

- arrests of drivers and executives.
- Protests and demonstrations from the taxi industry, and in extreme cases, physical violence or threats against Uber drivers.

As a result, this option’s continued feasibility is uncertain given recent legal precedents.

Example Jurisdictions

- Toronto, ON; Edmonton, AB; Auburn, AL

Example Practices

- Jurisdictions inform Uber that they must operate under existing taxi regulations.
- Jurisdictions pass or enforce regulation that requires Uber to operate under the same, existing taxi regulations.
- If Uber decides to operate and disregard existing taxi regulations, jurisdictions typically file for a court injunction to enforce a ban on Uber. Typical parties include Uber Canada Inc. (Canadian company that provides ancillary local services, including marketing), Uber Technologies Inc. (US-based corporate owner), Uber B.V., (Dutch company who licenses the app for Uber riders) and Rasier Operations B.V. (Dutch company who licenses the app for Uber drivers).
- Enforcement strategies generally consist of undercover operations, where enforcement officers use the Uber app to request a ride, and once accepted, charge drivers with illegal operation of a taxi.

Strategic Considerations

- This option has not been fully realized and is unlikely to be unsuccessful in the long-term given legal precedents, as Uber typically decides to operate regardless of existing taxi regulation, claiming it is exempt from taxi regulations.
- If the City’s intent is to prevent Uber from operating under the current Vehicle for Hire Bylaw, this option has been successful as Uber has yet to apply for a taxi license.
- Uber has mounted significant public opposition in jurisdictions that attempt to ban their

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operation, often using public relations methods to gain the public's favour towards the company in order to mount public pressure against authorities.

- In the case of the City of Edmonton, AB's attempt to ban Uber, the City filed an injunction against Uber Canada Inc., but not Uber B.V. or Rasier Operations B.V.^[87] The court concluded that the City named the wrong parties in their application.

8.2.2 SWOT Analysis

Strengths

- Maintains the high standards of current taxi regulations, including accessibility, safety, and customer service, protecting the City from the reported disbenefits of Uber.
- Simpler regulatory framework, as there is only one "taxicab" category, with no differentiation between standard taxi vehicle for hire and ridesourcing vehicle for hire.
- Satisfies the taxi industry's preferences, as the industry argues that Uber should be "playing on the same field", i.e., be regulated by taxi regulations as Uber effectively provide taxi services. The industry argues this would promote fairer competition.

Opportunities

- The Passenger Transportation Board has announced they will carry undercover operations against any illegally operating Uber drivers, which would assist any enforcement operations the City would pursue.

Weaknesses

- This option is typically unable to be realized if the intent is for Uber to operate lawfully, as Uber either operates regardless of the regulation, or they decide to withdraw.
- Fails to acknowledge the distinct differences

between traditional taxis and ridesourcing that would promote innovation, and may not fully realize the benefits of ridesourcing.

- Requires resources for enforcement and to pursue potential legal action.
- Public opinion towards the City may decline given generally positive sentiment towards Uber in Vancouver if this option prevents Uber from operating.

Threats

- The Passenger Transportation Board may reverse their 2012 decision and choose to regulate the ridesourcing industry. As a result, the City would lack appropriate regulation for Uber at the municipal level.
- The Province may choose to remove Vancouver's authority to regulate ridesourcing by amending *The Vancouver Charter*.
- This option has failed in the case of Toronto and Edmonton, with Uber ignoring regulations that designate it as a "taxicab" company. Courts have denied applications for an injunction, which prompted the jurisdictions to review other options.
- Uber has entered several new Canadian markets in 2015, and could reverse their position of working collaboratively with authorities in Vancouver.
- The taxi industry may respond with a lawsuit against the City in the event Uber begins to operate in Vancouver.

[87] *City of Edmonton v. Uber Canada Inc.*, 2015 ABQB 214. Retrieved from: <http://www.canlii.org/en/ab/abqb/doc/2015/2015abqb214/2015abqb214.html>

8.3 OPTION 3: PERMIT ENTRY WITH NEW “TRANSPORTATION NETWORK COMPANY” CATEGORY

8.3.1 Overview

Description

The City can pursue **POLICY OPTION 3: PERMIT ENTRY WITH NEW “TRANSPORTATION NETWORK COMPANY” CATEGORY** and allow Uber to operate under a new vehicle for hire category called a “transportation network company” (TNC). This option is suitable for the City if it wishes to formally recognize ridesourcing as a distinct vehicle for hire service that is different from traditional taxi service.

Scholars and commentators have argued the TNC category allows for the most flexibility and regulatory control over the industry, and helps to promote innovation in the passenger transportation sector. The California Public Utilities Commission first developed the “transportation network company” category in the State of California in 2013 after almost a year of rulemaking that included extensive consultation with affected stakeholders. The TNC category covers companies that provide passenger transportation services using an online-enabled platform, and is distinct from taxicabs and limousines. Example definitions are provided below:

- **State of California, US:** “A Transportation Network Company (TNC) is a company or organization operating in California that provides transportation services using an online-enabled platform to connect passengers with drivers using their personal vehicles.”²
- **City of Seattle, WA:** “‘Transportation network company’ (TNC) means an organization whether a corporation, partnership, sole proprietor, or other form, licensed under this chapter and operating in the City of Seattle that offers prearranged transportation services for compensation using an online-enabled TNC application or platform to connect passengers

[88] California Public Utilities Commission. (2015). *Basic information for Transportation Network Companies and applicants*. San Francisco: State of California Public Utilities Commission. Retrieved from: http://www.cpuc.ca.gov/NR/rdonlyres/1788F1F1-EA38-4B68-B221-4116994F2252/0/TNC_App_Instrctns.pdf

with drivers using their personal vehicles and that meets the licensing requirements.” ... “Transportation network companies (TNC) provide application dispatch services (technology that allows consumers to directly request dispatch of for-hire drivers for trips via the internet using mobile interfaces such as smartphone applications,) to connect drivers with passengers for transportation services.”³

- **City of Chicago, IL:** “‘Transportation network provider’ or ‘provider’ means a person that offers or provides a transportation network service. ‘Transportation network service’ or ‘service’ means a prearranged transportation service offered or provided for compensation using an Internet-enabled application or digital platform to connect potential passengers with transportation network drivers. The term ‘transportation network service’ does not include a ‘ridesharing arrangement’...”⁴

The TNC category has been the most popular regulatory approach in the United States to accommodate Uber and other companies, and is likely to grow in number as more jurisdictions begin to consider regulating the ridesourcing industry.

Example Jurisdictions

- City of Chicago, IL; City of Portland, OR; City of Seattle, WA; State of California, US

Example Practices

- Jurisdictions undertake a comprehensive public consultation process with the public and industry to inform how new regulations should be crafted.
- As a way to avoid conferring any competitive advantages to Uber, the City of Portland, OR has proposed to deregulate aspects of the

[89] City of Seattle. (2015). “Municipal Code, Chapter 6.310 - Taxicab and for-hire vehicles.” *City of Seattle*. Retrieved from: https://www.municode.com/library/wa/seattle/codes/municipal_code?nodeId=TIT6BURE_SUBTITLE_IVNELICO_CH6.310TAFREVE_IGEP_6.310.130LIRE&showChanges=true

[90] City of Chicago. (2014). *Amendment of Municipal Code Titles 2, 3 and 9 concerning establishment of transportation network provider license*. Chicago: City of Chicago. Retrieved from: http://www.cityofchicago.org/content/dam/city/depts/bacp/rulesandregs/tnp_ord_clerk9115etal.pdf

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taxi industry, including removing the cap on the number of drivers for both taxis and TNC vehicles based on the rationale that if there are no caps for TNC vehicles, there should also be no caps for taxis.

Strategic Considerations

- The TNC category has been the most popular regulatory framework in over a dozen jurisdictions in the United States that have sought to regulate ridesourcing.⁵
- When the State of California first developed their TNC category, certain definitions provided in the original legislation were later to found to be ambiguous and inadequate. This prompted a review of the original legislation to amend aspects of it, reflecting the need for continual monitoring to ensure regulations are up-to-date and can adequately respond to issues as they arise from an evolving industry.

8.3.2 SWOT Analysis

Strengths

- Creates a harmonized regulatory framework that regulates both taxis and Uber together, while recognizing that ridesourcing is a new distinct vehicle for hire service that is different from traditional taxi service.
- Provides the most flexible regulatory regime, as regulations can more easily adapt to industry-specific changes as the ridesourcing industry evolves.
- Allows Uber to operate, conferring the reported benefits of ridesourcing to Vancouver consumers.

Opportunities

- The Passenger Transportation Board may revisit their 2012 decision and choose to regulate the ridesourcing industry. If so, the City could

collaborate with the PTB to ensure a harmonized regulatory approach to ridesourcing to avoid regulatory conflicts.

- Has been the most popular regulatory framework among jurisdictions, providing a wealth of opportunities to learn from the experiences of other jurisdictions.
- May present an opportunity to rethink existing taxi regulations, such as in the case of the City of Portland, OR and their decision to remove their cap on the number of taxi vehicles.

Weaknesses

- Requires significant research and analysis to develop an appropriate regulatory framework that is suitable to the City's goals and objectives.
- Requires collaboration with the Passenger Transportation Board to create a harmonized regulatory framework under the concurrent authority regime. Failure to do this may result in regulatory conflicts between regulation at the provincial and municipal level.

Threats

- The Province may choose to remove Vancouver's authority to regulate ridesourcing by amending *The Vancouver Charter*.
- The taxi industry may respond with a lawsuit against the City in the event Uber begins to operate in Vancouver.
- The taxi industry may be dissatisfied with this option if it is designed in a way that confers competitive advantages to Uber.

[91] Hui, A. (2015, September 9). "Toronto looks to update by-laws to recognize new technology like Uber." The Globe and Mail. Retrieved from: <http://www.theglobeandmail.com/news/toronto/lower-toronto-cab-fares-to-level-playing-field-with-uber-city-report-urges/article26272790>

8.4 OPTION 4: PERMIT ENTRY WITH SHARED VEHICLE FOR HIRE CATEGORY

8.4.1 Overview

Description

The City can pursue **POLICY OPTION 4: PERMIT ENTRY WITH SHARED VEHICLE FOR HIRE CATEGORY** and allow Uber to operate under a modified vehicle for hire category.

This option is suitable for the City if it wishes to recognize ridesourcing as a vehicle for hire service, but would prefer to regulate it together with an existing, but modified vehicle for hire category. Ridesourcing companies would be regulated under a shared regulatory category that includes other vehicle for hire services, such as limousines. This is in contrast to **POLICY OPTION 3**, where the “transportation network company” category is a new and distinct category that only contains ridesourcing services. This option has been less popular among jurisdictions that have sought to regulate Uber.

Example Jurisdictions

- Region of Waterloo, ON

Example Practices

- Jurisdictions undertake a comprehensive public consultation process with the public and industry to inform how new regulations should be crafted.
- The Region of Waterloo, ON consolidated their vehicle for hire regulations into a single taxi bylaw and proposed that vehicle for hire services would fall under two categories, Taxi and Auxiliary Taxi. The distinction is made between vehicles that have a meter (Taxi) and do not have a meter (Auxiliary Taxi), with Uber vehicles being classified as the latter.

Strategic Considerations

- In the Region of Waterloo, ON, Uber is regulated as an Auxiliary Taxi category that is shared with limousines and other non-taxi vehicle for hire services. As the ridesourcing industry evolves, it may prompt reevaluation of regulations

targeted at ridesourcing services. However, any regulatory changes targeted to ridesourcing may not necessarily be wholly applicable to non-ridesourcing services in a shared regulatory category, and inadvertently cause unintended effects. As a result, this policy option may not be very adaptable and potentially create unintended issues in the future.

8.4.2 SWOT Analysis

Strengths

- Creates a harmonized regulatory framework that regulates both taxis and Uber together.
- Allows Uber to operate, conferring the reported benefits of ridesourcing to Vancouver consumers.

Opportunities

- The Passenger Transportation Board may revisit their 2012 decision and choose to regulate the ridesourcing industry. If so, the City could collaborate with the PTB to ensure a harmonized regulatory approach to ridesourcing to avoid regulatory conflicts.

Weaknesses

- Requires significant research and analysis to develop an appropriate regulatory framework that is suitable to the City’s goals and objectives.
- Requires collaboration with the Passenger Transportation Board to create a harmonized regulatory framework under the concurrent authority regime. Failure to do this may result in regulatory conflicts between regulation at the provincial and municipal level.
- Legal commentators have noted that regulating ridesourcing within traditional definitions of taxicabs may create overinclusive definitions, which may have unintended consequences in the future. Also, shared categories may not fully realize the benefits of ridesourcing. For example, compared to **POLICY OPTION 3**, it may be less flexible in adapting to industry-specific changes as the ridesourcing industry evolves.

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Any new regulations that are intended to target ridesourcing services specifically may have unintended conflict with other vehicle for hire services, as these new regulatory changes would apply to non-ridesourcing services as well under a shared category approach.

- The taxi industry may be dissatisfied with this option if it is designed in a way that confers competitive advantages to Uber.

Threats

- The Province may choose to remove Vancouver's authority to regulate ridesourcing by amending *The Vancouver Charter*.
- The taxi industry may respond with a lawsuit against the City in the event Uber begins to operate in Vancouver.

8.5 POLICY OPTION EVALUATION

In sum, the City of Vancouver has four policy approaches it can consider:

- **Option 1:** Do Nothing;
- **Option 2:** Permit Entry with Existing "Taxicab" Category;
- **Option 3:** Permit Entry with New "Transportation Network Company" Category; and
- **Option 4:** Permit Entry with Modified Vehicle for Hire Category.

For the purposes of this report, a set of policy evaluation criteria were not developed as there was no stakeholder consultation conducted to inform the development of a set of criteria. As a result, these policy options are presented as is with no recommended ranking.

City staff will have to conduct further work to determine the recommended policy approach for the City of Vancouver to pursue.

9.0 RIDESOURCING TRANSPORTATION IMPACT FUND

9.1 OVERVIEW

9.1.1 Background

Securing transportation funding has been an ongoing topic of discussion and political issue in the Vancouver region, involving all members of society including local governments, the private and non-profit sectors, academic institutions, community organizations, and the general public. With the failed Metro Vancouver Transit and Transportation Plebiscite in 2015, the City of Vancouver and other local governments will now have to seek alternative ways to fund the region's transportation system in order to meet ambitious community sustainability goals and targets.

However, there has not been a comprehensive examination of the potential that the new ridesourcing industry can offer to the transportation funding formula. For example, a report by the Fraser Institute noted that the Mayor's Council gave little consideration to the potential and impact of ridesourcing within their transportation plan proposal. Technical analysis conducted by BC Ministry of Transportation and Infrastructure, TransLink, and the Mayors' Council did not consider ridesourcing either when determining potential revenue sources to support transportation improvements in the region.

9.1.2 Proposal

Given the economic impacts of ridesourcing (see **SECTION 6.0: REVIEW OF IMPACTS**) and the need to seek alternative funding sources for transportation, there is an opportunity for the City of Vancouver (and the region) to look towards the ridesourcing industry as a new potential source. A few jurisdictions in North America have required ridesourcing companies to contribute money towards a transportation-related fund. The City of Vancouver should pursue a Ridesourcing Transportation Impact Fund (RTIF) as a way to mitigate the impacts of ridesourcing and diversify their transportation revenue

sources.

Revenue collected from the RTIF could be dedicated towards different transportation improvement projects, depending on the RTIF's mandate, goals, and objectives. These include:

- General transportation improvement;
- Taxi industry; and
- Wheelchair accessible service.

The specific way revenue has been collected in other jurisdictions is typically either through a percentage of gross receipt per trip or a set rate per trip. Determining the funding target will require detailed analysis and a multi-criteria evaluation process to determine the best use of the revenue.

One important consideration if the City were to consider a new funding source is that the funds generated should be linked to a specific and direct impact of ridesourcing. In other words, the City should not be exacting an arbitrary tax on ridesourcing companies with poor rationale. Further considerations of the role of the RTIF will need to be made if other municipalities in Metro Vancouver, TransLink, or the BC Ministry of Transportation and Infrastructure consider this proposal.

9.1.3 Funding Target

Jurisdictions that have implemented such a fund have tended to dedicate the fund towards improving wheelchair accessible service, as it is one of the largest concerns of the impact of the ridesourcing industry. However, jurisdictions such as the City of Portland have also proposed strict accessibility requirements for TNCs such as required service response time. If these accessibility requirements for TNCs were successfully met, it may render such a ridesourcing fund to be redundant, as the goal of providing accessible service has already been met through other policy mechanisms.

This could warrant exploring other, more innovative targets for transportation improvements from the RTIF that could potentially take advantage of the benefits

9.0 | RIDESOURCING TRANSPORTATION IMPACT FUND

of ridesourcing (e.g., transit integration) and make the City of Vancouver a leader in the area of ridesourcing transportation funding. However, this would require further research.

9.2 PRECEDENTS

There have been at least five jurisdictions in North America that have established or proposed a ridesourcing-related fund.

- **City of Seattle, WA: Wheelchair Accessible Services Fund**^[94]

The City of Seattle requires a \$0.20 “Accessibility and Admin Fee” per ridesourcing ride originating in Seattle—\$0.10 goes towards the Accessibility Fee, while \$0.10 goes towards the Admin Fee. The fee is passed onto the consumer.

The Wheelchair Accessible Services Fund is intended to offset the higher operational costs of wheelchair accessible taxi services (for both owners and operators), including the costs associated with purchasing and retrofitting an accessible vehicle, extra fuel and maintenance costs, and time involved in providing wheelchair accessible trips. The Fee is expected to generate \$850,000 annually.

While the Accessibility Fee portion is standard and applicable across all taxi, for-hire, and TNC services, the Admin Fee is specific to TNCs as it covers the extra enforcement and regulatory costs of TNC licensing, vehicle endorsements, and driver licensing.

- **City of Chicago, IL: Accessibility Fund**^[95]

The City of Chicago requires a \$0.30 “Transit

Tax & Accessibility Fee” per ridesourcing trip—\$0.20 goes towards the Transit Tax, while \$0.10 goes towards the Accessibility Fee. The fee is passed onto the consumer.

The Accessibility Fund is intended to improve the services of taxicabs and ridesourcing vehicles for people with disabilities. The fund will provide reimbursements for costs associated with converting or purchasing a vehicle that is fully wheelchair accessible by ramp or lift. While all taxicabs and other for-hire companies are required to pay the Transit Tax, the Accessibility Fee portion is unique to ridesourcing companies.

- **District of Columbia, US: Public Vehicles-for-Hire Consumer Service Fund**^[96]

The District of Columbia requires a 1% “DC Taxicab Commission Fee” of gross receipt per ridesourcing trip originating in DC. The Fund is a general fund collected from a variety of vehicle for hire services, but the 1% fee is unique to digital dispatch services such as Uber.

The purpose of the Fund is to cover the operating costs for DC Taxicab Commission; provide grants, loans, incentives, or other financial incentives to offset the cost of acquiring, maintaining, and operating wheelchair-accessible vehicles for taxicab owners; incentivizing the purchase and use of alternative-fuel vehicles; directing taxicabs to underserved areas; and meeting any other mandates. The Fund also provides a taxicab fare discount for low-income seniors.

- **City of Portland, OR: Accessible Transportation Fund**^[97]

The City of Portland has proposed an Accessible Transportation Fund to help finance wheelchair

[94] City of Seattle. (2015). “Municipal Code, Chapter 6.310 - Taxicab and for-hire vehicles.” *City of Seattle*. Retrieved from: https://www.municode.com/library/wa/seattle/codes/municipal_code?nodeId=TIT6BURE_SUBTITLE_IVNELICO_CH6.310TAFREVE_IGEP6.310.130LIRE&showChanges=true

[95] City of Chicago. (2014). *Amendment of Municipal Code Titles 2, 3 and 9 concerning establishment of transportation network provider license*. Chicago: City of Chicago. Retrieved from: http://www.cityofchicago.org/content/dam/city/depts/bacp/rulesandregs/tnp_ord_clerk9115etal.pdf

[96] Washington, DC. (2014). *Transportation Network Services Innovation Act of 2014*. Washington, DC. Retrieved from: https://legiscan.com/DC/text/B20-0753/id/1048630/Washington_D_C_-2013-B20-0753-Engrossed.pdf

[97] City of Portland. (2015). *Private For-Hire Transportation Innovation Task Force recommendations on taxis and TNCs*. Portland: City of Portland. Retrieved from: <https://www.portlandoregon.gov/transportation/article/540543>

accessible service, with the fund to be used as an incentive to ensure the higher cost of providing accessible service is not a barrier for companies or drivers. The proposal would require a per ride surcharge (\$0.10 was cited as an example) for all vehicle for hire in the city.

The City would also develop an incentive program to be administered by the City that would be responsible for reimbursement to all for hire companies and/or drivers for the higher cost of accessible vehicles and trips. Reimbursement would be based upon a per-ride multiplier (e.g., 275% x fare of comparable non-wheelchair accessible ride).

- **Mexico City, Mexico: Fondo para el Taxi, la Movilidad y el Peatón (Fund for Taxis, Mobility and Pedestrians)**^[98]
Mexico City requires a contribution of 1.5% of gross receipt per ridesourcing trip to a fund dedicated for taxi and general transportation improvements. The specific details of the fund are difficult to source due to the language.
- **City of Montreal, QC**^[99]
As part of Uber's negotiations with the Province of Quebec to permit ridesourcing services, the company offered to pay \$0.10 for every trip.

9.3 FINANCIAL ANALYSIS

9.3.1 Methodology

Jurisdictions require ridesourcing companies to contribute to their ridesourcing-related transportation fund either through a percentage of gross receipt per trip or a set rate per trip. Based on this funding formula, the potential revenue generation can be estimated by

[98] Ciudad de México. (2015). *Administración pública del distrito federal*. Mexico: Ciudad de México. Retrieved from: <http://ep00.epimg.net/descargables/2015/07/16/bda0d33495689ce3f80710d8f744b382.pdf>

[99] CTV Montreal. (2015, August 19). "Taxi in Quebec moving into the mobile era." *CTV News Montreal*. Retrieved from: <http://montreal.ctvnews.ca/taxis-in-quebec-moving-into-the-mobile-era-1.2523994>

using the following information based on Uber's fare calculation formula.

- The total annual number of passenger trips for Uber;
- The mean distance travelled calculated for a year for all Uber trips; and
- The mean travel time calculated for a year for all Uber trips.

For jurisdictions where Uber is not operating in, and hence no data is available, a taxi trip substitution rate and an induced demand factor can be used to estimate the number of Uber trips. The rationale for this approach is that because Uber and taxis share a similar market, the market demand for Uber, as measured by the total number of trips for a jurisdiction, can be estimated by using the total number of taxi trips, i.e. existing taxi demand, as a baseline.

EQUATION 1 [EQ1] was developed to estimate the total annual number of Uber trips.

9.3.2 Results: Estimated Revenue

The total annual number of taxi trips in Vancouver could not be obtained from the Vancouver Taxi Association and Dr. Garland Chow from the UBC Sauder School of Business for the purposes of this study.^[100] For this reason, an estimate is calculated using data from TransLink's 2011 Regional Trip Diary Survey.^[101]

Caution should be exercised when interpreting the estimated total number of trips and revenue figures, as they are conservative given the number of assumptions regarding:

- Using taxi trips as a baseline for Uber trips;
- Estimated trip substitution rate; and

[100] Dr. Garland Chow serves as a consultant to the Vancouver Taxi Association. His biography can be found here: http://www.sauder.ubc.ca/Faculty/People/Faculty_Members/Chow_Garland

[101] TransLink. (2013). *2011 Metro Vancouver Regional Trip Diary Survey: Analysis Report*. New Westminster: TransLink. Retrieved from: http://www.translink.ca/-/media/Documents/customer_info/translink_listens/customer_surveys/trip_diaries/2011%20Metro%20Vancouver%20Regional%20Trip%20Diary%20Analysis%20Report.pdf

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- Estimated induced demand factor.

A funding rate of \$0.10 to \$0.30 per trip was used based on precedent from other jurisdictions. An estimated 2.7 million annual taxi trips in Vancouver was used. For trip substitution rates and induced demand factors:

- Trip substitution rates: 10% to 40% (see **SECTION 6.2: IMPACT: TAXI INDUSTRY**); and
- Induced demand factor: 10% (based on the study from the University of California Transportation Center, which the authors acknowledge is an underestimation^[102]).

To validate the approach, numbers from other jurisdictions were obtained. As a point of reference, there were 4,890,835 total annual taxi trips in the City of Seattle for 2009.^[103] Uber reported that their drivers in Ottawa made 150,000 trips in September 2015; extrapolating for a year, there are 1,800,000 annual trips.^[104] Considering these figures, the induced demand factors was calibrated to a range of 10% to 40%.

EQUATION 2 [EQ2] shows an example calculation using a trip substitution rate of 10% and an induced demand factor of 10%.

TABLE 10 shows a breakdown of the estimated total annual number of Uber trips, and **TABLES 11 to 13** shows a

[102] Rayle, L., Shaheen, S., Chan, N., Dai, D., & Cervero, R. (2014). *App-based, on-demand ride services: Comparing taxi and ridesourcing trips and user characteristics in San Francisco*. Berkeley: University of California Transportation Center. Retrieved from: <http://www.uctc.net/research/papers/UCTC-FR-2014-08.pdf>

[103] City of Seattle. (2010). *Seattle Taxicab Industry Revenue and Operating Statistics 2009-2010*. Seattle: City of Seattle. Retrieved from: <http://www.seattle.gov/purchasing/docs/bids/taximeter.pdf>

[104] Willing, J. (2015, October 5). "Uber makes 150,000 September trips across Ottawa." *Ottawa Sun*. Retrieved from: <http://www.ottawasun.com/2015/10/05/uber-makes-150000-september-trips-across-ottawa>

breakdown of the estimated RTIF annual revenue.

In summary, estimated annual revenue generated in Vancouver could range from \$54,000 to \$162,000 on the lower end, and \$243,000 to \$731,000 on the higher end.

The estimated revenue generated at \$0.10 per trip range from \$54,000 to \$243,000:

- 10% induced demand: \$54,000 to \$135,000.
- 20% induced demand: \$81,000 to \$162,000.
- 30% induced demand: \$108,000 to \$189,000.
- 40% induced demand: \$135,000 to \$216,000.

The estimated revenue generated at \$0.20 per trip range from \$108,000 to \$487,000.

- 10% induced demand: \$108,000 to \$270,000.
- 20% induced demand: \$162,000 to \$324,000.
- 30% induced demand: \$216,000 to \$379,000.
- 40% induced demand: \$270,000 to \$433,000.

The estimated revenue generated at \$0.30 per trip range from \$162,000 to \$731,000.

- 10% induced demand: \$162,000 to \$406,000.
- 20% induced demand: \$243,000 to \$487,000.
- 30% induced demand: \$324,000 to \$568,000.
- 40% induced demand: \$406,000 to \$649,000

These estimates do not take into account the potential lost revenue the City collects from taxi companies (e.g., licensing fees) given the expected economic impact to the taxi industry.

$$[EQ1] \quad \text{Total Annual Uber Trips} = (\text{Total Annual Taxi Trips} \times \text{Trip Substitution Rate}) + (\text{Total Annual Taxi Trips} \times \text{Induced Demand Factor})$$

$$[EQ2] \quad 200,000 \text{ Total Annual Uber Trips} = (1,000,000 \times 0.10) + (1,000,000 \times 0.10)$$

Table 10. Estimated number of annual Uber trips in Vancouver.

Trip Substitution Rate	Induced Demand Factor			
	10%	20%	30%	40%
Low = 10%	541,514	812,271	1,083,028	1,353,785
Low-Moderate = 20%	812,271	1,083,028	1,353,785	1,624,542
Moderate-High = 30%	1,083,028	1,353,785	1,624,542	1,895,299
High = 40%	1,353,785	1,624,542	1,895,299	2,166,056

Table 11. Estimated annual revenue for the Ridesourcing Transportation Impact Fund: \$0.10 per trip.

Trip Substitution Rate	Induced Demand Factor			
	10%	20%	30%	40%
Low = 10%	\$54,151	\$81,227	\$108,303	\$135,379
Low-Moderate = 20%	\$81,227	\$108,303	\$135,379	\$162,454
Moderate-High = 30%	\$108,303	\$135,379	\$162,454	\$189,530
High = 40%	\$135,379	\$162,454	\$189,530	\$216,606

Table 12. Estimated annual revenue for the Ridesourcing Transportation Impact Fund: \$0.20 per trip.

Trip Substitution Rate	Induced Demand Factor			
	10%	20%	30%	40%
Low = 10%	\$108,303	\$162,454	\$216,606	\$270,757
Low-Moderate = 20%	\$162,454	\$216,606	\$270,757	\$324,908
Moderate-High = 30%	\$216,606	\$270,757	\$324,908	\$379,060
High = 40%	\$270,757	\$324,908	\$379,060	\$433,211

Table 13. Estimated annual revenue for the Ridesourcing Transportation Impact Fund: \$0.30 per trip.

Trip Substitution Rate	Induced Demand Factor			
	10%	20%	30%	40%
Low = 10%	\$162,454	\$243,681	\$324,908	\$406,136
Low-Moderate = 20%	\$243,681	\$324,908	\$406,136	\$487,363
Moderate-High = 30%	\$324,908	\$406,136	\$487,363	\$568,590
High = 40%	\$406,136	\$487,363	\$568,590	\$649,817

10.0 | STRATEGIC RECOMMENDATIONS AND CONSIDERATIONS

10.0 STRATEGIC RECOMMENDATIONS AND CONSIDERATIONS

Based on the report's findings, a number of strategic recommendations (SR) and considerations (SC) have been developed for the City of Vancouver if it decides to move forward with regulating the ridesourcing industry.

10.1 STRATEGIC RECOMMENDATIONS

SR1 Conduct a broad consultation process with the public and industry stakeholders, including the accessibility community, to determine their views on ridesourcing.

Stakeholder(s):

CoV Licensing, CoV Transportation, CoV Sustainability, Vancouver Taxi Association, Uber, General Community

Description:

Based on the existing market research regarding Uber in Canada, public opinion can differ across jurisdictions. In deciding which policy option should be adopted and the specific type of regulations required for Vancouver, the City should make an informed decision based on public and industry views, as the introduction of Uber will have a significant impact for both stakeholders.

There should be particular attention given to the accessibility community given their concerns about ridesourcing, and based on the difficulties encountered in other jurisdictions.

Example - City of Toronto, ON:

The City of Toronto, ON conducted a Ground Transportation Review to determine:

- What bylaw changes are necessary to bring new and emerging technologies into regulation as part of the City's for-hire ground transportation industry;
- How the City can ensure public safety and consumer protection are maintained, and;
- How the City can ensure a level playing field is established and maintained with respect to

commercial insurance, driver training, equality of fares and other licensing issues.

The City's stakeholder and public consultation process included stakeholder meetings and an industry and public survey. The City also retained Ipsos Reid to conduct market research that included a general population survey, focus groups, and interviews. Questions in the City's survey included (see **APPENDIX H: EXAMPLE RESEARCH SURVEY QUESTIONNAIRES**):

Public Survey:

- Opinion on regulation of taxicab fares;
- Opinion on regulation for taxicabs; and
- Opinion on regulation for Uber.

Industry Survey:

- Perception of public usage of Uber services;
- Ability to compete with Uber;
- Opinion on regulation for Uber; and
- Opinion on regulation for taxicabs.

Example - City of Seattle, WA:

The City of Seattle's approach has been cited in at least two legal commentaries for the City's comprehensive, inclusive, and middle ground approach.^[105] As one article notes:

"...Seattle residents had the opportunity to attend hearings, send letters to their elected officials, and participate in a referendum. The local political process may have allowed the City Council to hear from and consider a broader coalition of interests regarding the effects of TNCs on the city. In addition, the Seattle City Council may have been able to respond to public sentiment more quickly than a state or federal body; the City Council approved the compromise proposal in July, just a few months after the original ordinance was passed. Finally, because Seattle retains jurisdiction over both TNCs and taxi companies, the City Council was also

[105] Dobson, E. (2015). "Transportation network companies: How should South Carolina adjust its regulatory framework?" *South Carolina Law Review*, 66(701): 701-725;
Strong, K.C. (2015). "When apps pollute: Regulating transportation network companies to maximize environmental benefits." *University of Colorado Law Review*, 86(1049): 1049-1093.

able to use the ordinance to ease unnecessary constraints on taxi companies and more fully address unmet demand for transportation services.”

SR2 Continue the Vehicle for Hire Dialogues with Uber’s continued involvement as a formal stakeholder.

Stakeholder(s):

CoV Licensing, CoV Transportation, CoV Persons with Disabilities Advisory Committee, Passenger Transportation Board, Vancouver Taxi Association, Uber

Description:

Uber has expressed their desire to work collaboratively with the City to develop regulation for ridesourcing, as opposed to the company’s more conflict ridden tactics in other jurisdictions. If the City chooses to regulate the industry, the Vehicle for Hire Dialogues should be used as a forum for the City, the PTB, the taxi industry, Uber, and other stakeholders to work together and develop the appropriate regulation for Vancouver. Meetings should be specific to ridesourcing regulation, and not broader taxi industry issues.

Example - City of Austin, TX:

The City of Austin, TX created a Transportation Network Company Working Group as part of their ongoing Austin Taxicab Task Force.^[106] The purpose of the Working Group was to study the role of TNCs and how to develop a new TNC pilot program. Stakeholders included City staff, TNCs, potential customers of TNCs, taxi companies and drivers, student and university representatives, public safety representatives, disabled community representatives, and commercial and personal insurance representatives.

Meetings took place from June to September 2014, with each meeting focusing on a set of specific regulatory topics that would define the scope of the pilot program, including, but not limited to:

- Driver and passenger safety;
- Data reporting;
- Insurance;
- Accessibility, and
- Fleet size.

SR3 Continue to monitor the ridesourcing industry, including ongoing events and emerging regulations in other jurisdictions.

Stakeholder(s):

CoV Licensing, CoV Transportation

Description:

The ridesourcing industry is rapidly evolving, with media coverage on new events on a regular basis. Many jurisdictions have begun to regulate the industry, developing novel policies and regulatory tools. Furthermore, Uber and other companies continue to develop and launch new services, partnerships, and products (e.g., such as ridesourcing-specific insurance products).

All these developments will require the City to continually monitor and track how the ridesourcing industry is evolving, and the implications it may have for Vancouver. This will allow the City to make an informed and adequate response if it proceeds with regulating the industry.

SR4 Consult and collaborate with the Passenger Transportation Board to develop a harmonized regulatory regime for ridesourcing.

Stakeholder(s):

CoV Licensing, CoV Transportation, CoV Sustainability, Passenger Transportation Board

Description:

The City of Vancouver and the Passenger Transportation Board share concurrent authority over the regulation of taxis. Historically, the City and the PTB have generally cooperated with each other in terms of developing taxi

[106] City of Austin. (2014). *Resolution No. 20140515-024*. Austin: City of Austin. Retrieved from: <http://www.austintexas.gov/edims/document.cfm?id=210414>

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regulations and licensing. The PTB has indicated they are monitoring Uber and the ridesourcing industry since their 2012 decision. However, they have not yet announced any plans to regulate the industry. However, this may change in the future.

As this report demonstrates, jurisdictions have taken a variety of approaches towards regulating ridesourcing. For this reason, there is the potential that the PTB may propose a regulatory regime, or have regulatory aspects in their approach, that are at odds with:

- What City staff and City Council deem to be in the best interest of Vancouver; and
- What would be best fulfilling Council's October 2014 Motion of ensuring customers achieve the full benefits of new ridesourcing technology.

Entering into conversations with the PTB will ensure a harmonized regulatory approach. This would help to avoid any potential conflicts in goals, objectives, and regulatory aspects between the PTB and the City.

Example - State of Wisconsin:

This issue of regulatory conflict is present in jurisdictions where there are at least two levels of government that have or share authority over vehicle for hire. The City of Madison, WI passed a local ordinance to regulate and permit the operation of Uber. However, shortly afterwards, the State of Wisconsin passed a new transportation network company bill that included a preempt provision that restricted local governments from passing additional regulation on TNCs.^[107] This meant that the City of Madison's stricter TNC regulations were rendered null, representing a significant loss in terms of staff and stakeholder resources and time in developing the local TNC regulation.^[108]

[107] Wisconsin Office of the Governor. (2015, May 1). "Governor Scott Walker Signs Assembly Bill 143 Into Law." *Wisconsin: Office of the Governor*. Retrieved from: <http://walker.wi.gov/newsroom/press-release/governor-scott-walker-signs-assembly-bill-143-law>. See Bill 143: "440.465 Limitations on local and other regulation. (1) Section 349.24 does not apply to a transportation network company or to a participating driver engaged in transportation network services or the participating driver's personal vehicle used for those services. No city, village, town, or county may enact or enforce 25an ordinance or adopt or enforce a resolution that regulates a transportation network."

[108] WORT 89.9 fm. (2015). "State lawmakers kill Madison's new Uber ordinance." *WORT 89.9*. Retrieved from: <http://www.wortfm.org/state-lawmakers-kill-madisons-new-uber-ordinance>

Example - City of Columbus, OH

The City of Columbus, OH passed a local ordinance regulating TNCs. However, the State of Columbus is currently developing uniform, statewide regulations that Uber and other ridesourcing companies have requested. These new state regulations would nullify Columbus' local regulations. City officials from Columbus have expressed concern that the new legislation would weaken their safety provisions, such as dropping the City of Columbus' requirement for fingerprint scans as part of the driver background check.^[109]

SR5 Consult and collaborate with other Metro Vancouver member municipalities to develop a regional approach to ridesourcing.

Stakeholder(s):

CoV Licensing, CoV Transportation, CoV Sustainability, Metro Vancouver Member Municipalities

Description:

A few Metro Vancouver municipalities have been approached by Uber and/or are conducting work on ridesourcing. City of Vancouver staff would benefit from engaging with other municipalities in order to share information, and potentially collaborate to take advantage of the staff time and resources available at each municipality.

If the PTB chooses to regulate the ridesourcing industry, the City of Vancouver and other municipalities may choose to further regulate through municipal regulations. Developing a regional approach to ridesourcing may be beneficial to achieve regional transportation goals and support transportation planning efforts, particularly if Metro Vancouver and TransLink are involved.

[109] Ghose, C. (2015, September 18). "Proposed statewide Uber regulations would nullify Columbus ordinance." *Columbus Business First*. Retrieved from: <http://www.bizjournals.com/columbus/news/2015/09/18/proposed-statewide-uber-regulations-would-nullify.html>

SR6 Implement ridesourcing regulations under a pilot program in order to monitor and evaluate the effectiveness of any proposed regulation.

Stakeholder(s):

CoV Licensing, CoV Transportation, CoV Sustainability, Passenger Transportation Board, Vancouver Taxi Association, Uber, Consultant

Description:

If the City proceeds with regulating Uber, it should be implemented under a limited period trial program.

Scholars recommend that policymakers should consider the use of trial programs when developing and adopting experimental regulations.^[110] Particularly within the context of the sharing economy, an incubation or trial period (e.g., using a sunset clause) allows jurisdictions to enact regulations for a temporary period of time in order to inform whether the regulation should be continued or modified based on monitoring and evaluation.^[111] This increases regulatory flexibility and allows jurisdictions to better adapt to rapid innovation that challenge traditional regulatory regimes.

Furthermore, a trial period would provide an opportunity to study longitudinally the impacts of Uber using a pre-post assessment research design. The City, for example, could commission a private sector or academic consultant to study the economic impacts to the taxi industry in a way that would be specific to Vancouver, and not based on the experiences of other jurisdictions. This would have the added benefit of maintaining Vancouver’s position as a place of leading-edge transportation-related research.

Example - City of Portland, OR:

When the City of Portland, OR permitted the entry of transportation network companies in their city in the summer of 2015, the City implemented a 120-day pilot. The program allowed interim operating permits to be issued to qualifying TNCs as part of a larger review of

[110] Ranchordás, S. (2013). “The whys and woes of experimental legislation.” *The Theory and Practice of Legislation*, 1(3): 415-440.
 [111] Ranchordás, S. (2015). “Does sharing mean caring? Regulating innovation in the sharing economy.” *Minnesota Journal of Law, Science & Technology*, 16(1): 1-63.

Portland’s private for-hire transportation regulations. This provided time for City to collect the necessary data to inform how the City’s regulations should be finalized, and help determine the future of TNCs in Portland. The 120-day pilot program mandated strict requirements for qualifying TNCs, including:

- Vehicle requirements;
- Operating requirements and prohibitions (e.g., trade dress);
- Driver background checks;
- Driver training (e.g., geographic knowledge and customer service);
- Driver-conduct requirements and prohibitions (e.g., maximum 14 hours of driving);
- Minimum level of service (e.g., 24/7 hour service);
- Insurance coverage;
- Accessibility provisions (e.g., increasing standards as the pilot program progresses); and
- Data requirements.

SR7 Implement a Ridesourcing Transportation Impact Fund to mitigate the impacts of ridesourcing, and to diversify the City’s transportation revenue sources.

Stakeholder(s):

CoV Licensing, CoV Transportation, TransLink, Metro Vancouver, Passenger Transportation Board, Vancouver Taxi Association, Uber

Description:

Securing transportation funding has been an ongoing topic of discussion and political issue in the Vancouver region. However, there has not been a comprehensive examination of the potential that the new ridesourcing industry can offer to the transportation funding formula. The City should pursue a Ridesourcing Transportation Impact Fund (RTIF) as a way to mitigate the impacts of ridesourcing and diversify their transportation revenue sources. The way revenue could be collected is either through a percentage of gross receipt per trip, or a set rate per trip. See **SECTION 9.0: RIDESOURCING TRANSPORTATION IMPACT FUND** for more details.

10.0 | STRATEGIC RECOMMENDATIONS AND CONSIDERATIONS

10.2 STRATEGIC CONSIDERATIONS

SR1 Uber has indicated preferences for the type of ridesourcing regulations.

Uber has expressed preferences for the type of ridesourcing regulations they wish to operate under. These include:

- **Regulation at the state/provincial level, instead of the municipal level**—Uber prefers dealing with state/provincial regulations as they apply to a wider geographic region, instead of individually dealing with a patchwork of different municipal regulations.
- **Regulation of the company, instead of individual drivers**—Uber prefers regulations targeted at the company itself, and not towards the drivers, such as requiring drivers to apply for a license.
- **Flexible supply to meet demand, i.e., no cap on the number of vehicles or drivers**—Uber stated they typically withdraw from jurisdictions that limit the number of vehicles or drivers, as it is an integral part of their business model.^[110]
- **Flexible pricing for regular operation, i.e., no restriction on their “surge pricing” model, where prices increase in during times of high demand**—Similar to flexible supply, surge pricing is an integral part of their business model. However, Uber has agreed to regulations that limit the use of surge pricing under certain situations, such as during emergencies and disasters.
- **Driver background checks using Uber’s electronic third-party system**—Uber prefers not to require its drivers to obtain background checks at local police stations, instead relying on its internal electronic background check system.

[112] Hawkins, A.J. (2015, June 15). “Uber accuses mayor, City Council of trying to ‘break it.’” *Crain’s*. Retrieved from: <http://www.crainnewyork.com/article/20150625/BLOGS04/150629937/uber-accuses-mayor-city-council-of-trying-to-break-it>

SR2 Uber has indicated preferences for their data sharing agreements.

Uber has indicated to the City of Vancouver that they are open to discussing a range of data sharing requirements with the City that are generally consistent with the City of Boston’s data requirements (see **SECTION 7.4.5 DATA SHARING**).

Uber is generally not supportive of data sharing agreements that require them to publicly reveal personal driver information, including names and addresses, in order to protect the privacy of their drivers.

SR3 Uber has indicated they will likely set their fares to be competitive with Car2Go.

Car2Go is a major carsharing company, operating in 14 cities in North America and 30 globally, with a worldwide fleet of 13,500 vehicles.^[113] The Vancouver region holds the unique position of having the largest Car2Go fleet of any place in the world with 1,250 vehicles. Uber has indicated to the City that they will likely set their fares to be competitive with Car2Go’s prices instead of taxi fares, in contrast to their typical practice in other jurisdictions. As a result, any economic analysis conducted by City staff should also take into account the impact on carsharing.

Similar to ridesourcing, research indicates that carsharing reduces vehicle ownership.^[114] For example, the Metro Vancouver Car Share Study found that on average, three private personal vehicles were shed per car share vehicle. When the avoidance of vehicle ownership was taken into account, each car share vehicle removed between 5 and 11 private personal vehicles from the use of current car share households.¹¹ However,

[113] Mackie, J. (2015, July 30). “Car share numbers rev up in Vancouver as drivers take the wheel.” *The Vancouver Sun*. Retrieved from: http://www.vancouversun.com/share+numbers+Vancouver+drivers+take+wheel/11252730/story.html?__lsa=e0d2-0966

[114] Martin, E., Shaheen, S.A., & Lidicker J. (2010). “Carsharing’s impact on household vehicle holdings: Results from a North American shared-use vehicle survey.” *Transportation Research Record: Journal of the Transportation Research Board*, 1986: 116-124. Retrieved from: <http://escholarship.org/uc/item/0850h6r5>

[115] Metro Vancouver. (2014). *The Metro Vancouver Car Share Study: Technical Report*. Burnaby: Metro Vancouver. Retrieved from: <http://www.metrovancouver.org/services/>

the findings regarding vehicle kilometres travelled was inconclusive—some households reported reductions in driving after joining a car sharing network, but other households with no vehicles prior reported driving more after joining a network.

As a result, ridesourcing may have the potential to be complementary or competitive with carsharing. There is no known research on the relationship between carsharing and ridesourcing services.

10.0 | STRATEGIC RECOMMENDATIONS AND CONSIDERATIONS

Table 14. Commentary on strategic considerations of Uber’s regulatory preferences.

Regulatory Preference	Commentary
Regulation at the state/provincial level, instead of the municipal level.	<ul style="list-style-type: none"> • This preference specifically serves the interest of Uber, as it minimizes the work they would need to do to comply with a variety of different regulations. • The existing regulatory regime of concurrent authority, with the Province’s “base” regulation and the City’s “additional” layer of regulation seems like a logical framework to extend if the City and/or PTB chooses to regulate ridesourcing. This helps to maintain industry standards and ensure excellence in the vehicle for hire industry in Vancouver. • However, this requires harmonized regulation at both the provincial and local level, i.e., regulations that do not conflict with each other.
Regulation of the company, instead of individual drivers.	<ul style="list-style-type: none"> • Regulations should be developed that are similar to the existing taxi regulations that address both the company and drivers. • Some jurisdictions require Uber drivers to acquire a municipal-issued license before they can provide ridesourcing services.
Flexible supply to meet demand.	<ul style="list-style-type: none"> • Uber’s business model is dependent on having flexible supply, i.e., no cap on the number of vehicles. • Uber has stated they would withdraw from a jurisdiction that places a cap, so this preference appears to be non-negotiable if the City would like for Uber to operate in Vancouver. • There are no known jurisdictions where Uber currently operates under a vehicle or driver cap.
Flexible pricing for regular operation.	<ul style="list-style-type: none"> • Uber’s business model is dependent on surge pricing, i.e., higher fares during periods of high demand. • Uber has expressed willingness to prohibit surge pricing for non-regular operation. The City should pursue all opportunities to develop any regulation that protect consumers financially, such as prohibiting surge pricing during times of emergency or for wheelchair accessible service.
Driver background checks using Uber’s electronic third-party system.	<ul style="list-style-type: none"> • Uber has been very persistent in using their own electronic third-party system for driver background checks. • The City should pursue all opportunities to ensure drivers can provide safe service to passengers in Vancouver, with requirements that meet or exceed existing taxi driver safety standards.
Preference for data sharing.	<ul style="list-style-type: none"> • Based on recommendations from legal commentators and transportation scholars, the City should pursue all opportunities to obtain the most data possible from Uber that is necessary to support transportation planning efforts in order to maximize the benefits of ridesourcing.

BIBLIOGRAPHY

Court Cases

- City of Edmonton v. Uber Canada Inc.**, 2015 ABQB 214. Retrieved from: <http://www.canlii.org/en/ab/abqb/doc/2015/2015abqb214/2015abqb214.html>
- Delta Sunshine Taxi (1972) Ltd. v. City of Vancouver**, 2015 BCSC 357. Retrieved from: <http://www.courts.gov.bc.ca/jdb-txt/SC/15/03/2015BCSC0357.htm>
- City of Toronto v Uber Canada Inc, et al**, 2015 ONSC 3572. Retrieved from: <http://www.canlii.org/en/on/onsc/doc/2015/2015onsc3572/2015onsc3572.html>

Blog Posts

- Fischer-Baum, R., & Bialik, C.** (2015, October 13). "Uber is taking millions of Manhattan rides away from taxis." *FiveThirtyEight*. Retrieved from: <http://fivethirtyeight.com/features/uber-is-taking-millions-of-manhattan-rides-away-from-taxis>
- Hughes, N.** (2012, January 2). "Hey Uber, I Like Your Ride...But Not Sure It's Worth the \$143 You Charged Me." *So Entrepreneurial*. Retrieved from: <http://soentrepreneurial.com/2012/01/02/hey-uber-i-like-your-ride-but-not-sure-its-worth-the-143-you-charged-me>
- Meyers, L.** (2015, August 18). "Once again, NYC data shows resilience of taxi medallions." *Seeking Alpha*. Retrieved from: <http://seekingalpha.com/article/3448986-once-again-nyc-data-shows-resilience-of-taxi-medallions>
- Miller, S.** (2015, July 22). "Uber's own numbers show it's making traffic worse." *StreetsBlog NYC*. Retrieved from: <http://www.streetsblog.org/2015/07/22/ubers-own-data-reveals-it-slows-manhattan-traffic-9-percent>

Documents - Government

- Alberta Treasury Board and Finance.** (2015, July 27). *Caution regarding ride sharing services and insurance*. Edmonton: Alberta Treasury Board and Finance. Retrieved from: <http://www.finance.alberta.ca/publications/insurance/Superintendent-of-Insurance-Bulletin-02-2015.pdf>
- California Public Utilities Commission.** (2015). *Basic information for Transportation Network Companies and applicants*. San Francisco: State of California Public Utilities Commission. Retrieved from: http://www.cpuc.ca.gov/NR/rdonlyres/1788F1F1-EA38-4B68-B221-4116994F2252/0/TNC_App_Instrctns.pdf
- _____. (2013). *Reply comments to the order instituting rulemaking filed on behalf of the San Francisco Municipal Transportation Agency*. San Francisco: California Public Utilities Commission. Retrieved from: <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M042/K156/42156522.pdf>
- City of Austin.** (2014). *Resolution No. 20140515-024*. Austin: City of Austin. Retrieved from: <http://www.austintexas.gov/edims/document.cfm?id=210414>
- City of Burnaby.** (2014). *Uber ride-sharing service (Council Report)*. Burnaby: City of Burnaby. Retrieved from: [https://burnaby.civicweb.net/document/15149/2014%2010%2027%20-%20Uber%20Ride%20Sharing%20Service%20\(2\).pdf](https://burnaby.civicweb.net/document/15149/2014%2010%2027%20-%20Uber%20Ride%20Sharing%20Service%20(2).pdf)
- City of Chicago.** (2014). *Amendment of Municipal Code Titles 2, 3 and 9 concerning establishment of transportation network provider license*. Chicago: City of Chicago. Retrieved from: http://www.cityofchicago.org/content/dam/city/depts/bacp/rulesandregs/tnp_ord_clerk9115etal.pdf
- City of Houston.** (2014). *FAQ: Chapter 46 Related to Vehicles-for-Hire Amendments Approved 8/6/2014*. Houston: City of Houston. Retrieved from: https://www.houstontx.gov/ara/chapter46docs/vehicle_for_hire-faqs.pdf
- City of Portland.** (2015). *Environmental Considerations: City of Portland Private For-Hire Transportation Innovation Task Force Subcommittee on Market and Program Considerations*. Portland: City of Portland. Retrieved from: <https://www.portlandoregon.gov/transportation/article/533860>
- _____. (2015). *Private For-Hire Transportation Innovation Task Force recommendations on taxis and TNCs*. Portland: City of Portland. Retrieved from: <https://www.portlandoregon.gov/transportation/article/540543>

BIBLIOGRAPHY

- City of Seattle.** (2010). *Seattle Taxicab Industry Revenue and Operating Statistics 2009-2010*. Seattle: City of Seattle. Retrieved from: <http://www.seattle.gov/purchasing/docs/bids/taximeter.pdf>
- Ciudad de México.** (2015). *Administración pública del distrito federal*. Mexico: Ciudad de México. Retrieved from: <http://ep00.epimg.net/descargables/2015/07/16/bda0d33495689ce3f80710d8f744b382.pdf>
- Metro Vancouver.** (2014). *The Metro Vancouver Car Share Study: Technical Report*. Burnaby: Metro Vancouver. Retrieved from: <http://www.metrovancouver.org/services/regional-planning/PlanningPublications/MetroVancouverCarShareStudyTechnicalReport.pdf>
- New York City Taxi and Limousine Commission.** (2015). *Notice of Public Hearing and Opportunity to Comment on Proposed Rules*. New York: New York City Taxi and Limousine Commission. http://www.nyc.gov/html/tlc/downloads/pdf/proposed_rules_fhv_app_cert.pdf
- NightlifeSF.** (2015, February 23). *The Other 9-to-5: Improving Late-Night and Early-Morning Transportation for San Francisco Workers, Residents, and Visitors*. San Francisco: NightlifeSF. Retrieved from: <http://nightlifesf.org/the-other-9-to-5-improving-late-night-and-early-morning-transportation-for-san-francisco-workers-residents-and-visitors>
- TransLink.** (2013). *2011 Metro Vancouver Regional Trip Diary Survey: Analysis Report*. New Westminster: TransLink. Retrieved from: http://www.translink.ca/-/media/Documents/customer_info/translink_listens/customer_surveys/trip_diaries/2011%20Metro%20Vancouver%20Regional%20Trip%20Diary%20%20Analysis%20Report.pdf
- TransLink Joint Technical Committee.** (2012). *Evaluation of revenue sources to support transportation improvements in Metro Vancouver: Results and recommendations from step 1 of the evaluation process*. Vancouver: TransLink. Retrieved from: <https://www.taxpayer.com/media/TransLink%20funding%20options.pdf>
- Washington, DC.** (2014). *Transportation Network Services Innovation Act of 2014*. Washington, DC. Retrieved from: https://legiscan.com/DC/text/B20-0753/id/1048630/Washington_D_C_-2013-B20-0753-Engrossed.pdf
- Documents - Non-Government**
- Certify.** (2015). *Sharing the Road: Uber on the Rise Nationwide*. Portland: Certify. Retrieved from: http://ma.certify.com/1/16202/2015-07-16/y1lqh/16202/90210/Sharing_Economy_Q2_Report.pdf
- Copenhagen Economics.** (2015). *Economic benefits of peer-to-peer transport services*. Copenhagen: Copenhagen Economics. Retrieved from: <http://www.copenhageneconomics.com/publications/publication/economic-benefits-of-peer-to-peer-transport-services>
- Daus, M.W.** (2013). *Ridesharing applications: Illegal 'hitchhiking-for-hire' or sustainable group riding? A legal and policy primer for ground transportation regulation*. New York: Windels Marx. Retrieved from: <http://www.windelsmarx.com/resources/documents/Ridesharing%20%20Report.pdf>
- Denise, C.** (2014). *Is sharing really caring? A nuanced introduction to the peer economy*. New York: Open Society Foundations. Retrieved from: <http://static.opensocietyfoundations.org/misc/future-of-work/the-sharing-economy.pdf>
- Feeney, M.** (2015). *Is Ridesharing Safe?* Washington, DC: Cato Institute. Retrieved from: <http://www.cato.org/publications/policy-analysis/ridesharing-safe>
- Fraser Institute.** (2015). *Metro Vancouver's Transit Plan: Static Thinking in a Dynamic World*. Vancouver: Fraser Institute. Retrieved from: <https://www.fraserinstitute.org/sites/default/files/metro-vancouver-transit-plan-static-thinking-in-a-dynamic-world.pdf>
- Insights West.** (2014, December 22). "Two thirds of residents believe Metro Vancouver is not a leader in offering transportation choices." *Insights West*. Retrieved from: <http://www.insightswest.com/news/two-thirds-of-residents-believe-metro-vancouver-is-not-a-leader-in-offering-transportation-choices>
- KMPG.** (2014). *Me, my car, my life...in the ultraconnected age*. Amstelveen: KMPG. Retrieved from: <http://www.kpmg.com/Ca/en/IssuesAndInsights/ArticlesPublications/Documents/me-my-life-my>

- car.pdf
- Leger.** (2015). *Montrealer Support Survey*. Montreal: Uber Canada. Retrieved from: https://image.et.uber.com/lib/fe94127371650c7974/m/2/Uber_Leger_Poll_En.pdf
- Mainstreet Research.** (2015, August 21). "Support for Uber fluid across Canada." *Mainstreet Research*. Retrieved from: <http://www.mainstreetresearch.ca/support-for-uber-fluid-across-canada>
- Matute, J.M., & Pinceti, S.S.** (2014). *Compensated and real-time rideshare*. Los Angeles: California Center for Sustainable Communities. Retrieved from: <http://www.next10.org/sites/www.next10.org/files/5.%20Rideshare%20Barriers.pdf>
- Meyer, J.** (2015). *Uber-Positive: The Ride-Share Firm Expands Transportation Options in Low-Income New York*. New York: Manhattan Institute for Policy Research. Retrieved from: http://www.manhattan-institute.org/html/ib_38.htm
- National Association of Insurance Commissioners.** (2015). *Transportation Network Company Insurance Principles for Legislators and Regulators*. Washington, DC: NAIC. Retrieved from: http://www.naic.org/documents/committees_c_sharing_econ_wg_exposure_adopted_tnc_white_paper_150331.pdf
- Nicole, D., & Rainwater, B.** (2015). *The sharing economy: An analysis of current sentiment surrounding homesharing and ridesharing*. Washington, DC: National League of Cities. Retrieved from: <http://www.nlc.org/Documents/Find%20City%20Solutions/City-Solutions-and-Applied-Research/Sharing%20Economy%20Brief.pdf>
- One Earth.** (2015). *Local Governments and the Sharing Economy Project Roadmap Report*. Vancouver: One Earth.
- Smart, R., Rowe, B., Hawken, A., Kleiman, M., Mladenovic, N., Gehred, P., & Manning C.** (2015). *Faster and Cheaper: How Ride-Sourcing Fills a Gap in Low-Income Los Angeles Neighborhoods*. Los Angeles: BOTEC Analysis. Retrieved from: <http://botecanalysis.com/wp-content/uploads/2015/07/LATS-Final-Report.pdf>
- Teal, R.** (n.d.). *Economic impacts of app development and control*. Larne: Taxi Research Partners. Retrieved from: http://www.taxiresearch.org/Taxi_Research_Partners/Blank_files/Economic%20Impacts%20of%20App%20Development%20and%20Control.pdf
- Wallsten, S.** (2015). *The Competitive Effects of the Sharing Economy: How is Uber Changing Taxis?* Washington, DC: Technology Policy Institute. Retrieved from: https://www.techpolicyinstitute.org/files/wallsten_the%20competitive%20effects%20of%20uber.pdf

Scholarly Articles and Legal Comments

- Anderson, D.N.** (2014). "Not just a taxi? For-profit ridesharing, driver strategies, and VMT." *Transportation*, 41: 1099-1117. Retrieved from: <http://link.springer.com/article/10.1007%2Fs11116-014-9531-8>
- Avalos, M., & Sofia, P.** (2015). "Baby, you can('t) drive my car. El caso de Uber en México." *Economía Informa*, 390: 104-112. Retrieved from: <http://www.sciencedirect.com/science/article/pii/S0185084915300074>
- Barry, J.M., & Caron, P.L.** (2015). "Tax regulation, transportation innovation, and the sharing economy." *The University of Chicago Law Review*, 82: 69-84. Retrieved from: <https://lawreview.uchicago.edu/page/tax-regulation-transportation-innovation-and-sharing-economy>
- Bond, A.T.** (2015). "An app for that: Local governments and the rise of the sharing economy." *Notre Dame Law Review*, 90(2): 77-96. Retrieved from: http://scholarship.law.nd.edu/ndlr_online/vol90/iss2/3
- Cannon, B., & Chung, H.** (2015). "A framework for designing co-regulation models well-adapted to technology-facilitated sharing economies." *Santa Clara High Technology Law Journal*, 31(1): 23-96. Retrieved from: <http://digitalcommons.law.scu.edu/chtlj/vol31/iss1/2>
- Cici, B., & Frias-Martinez, E.** (2015). "Assessing the potential of ride-sharing using mobile and social data: A tale of four cities." Proceedings from UbiComp 2014. Retrieved from: http://odysseas.calit2.uci.edu/lib/exe/fetch.php/public:assessing_potential_of_ride_sharing.pdf
- Cohen, B., & Kietzmann, J.** (2014). "Ride on! Mobility business models for the sharing economy."

BIBLIOGRAPHY

- Organization & Environment*, 27(3): 279-296. Retrieved from: <http://oae.sagepub.com/content/27/3/279>
- Cohen, M. & Sundararajan, A.** (2015). "Self-regulation and innovation in the peer-to-peer sharing economy." *The University of Chicago Law Review*, 82: 116-133. Retrieved from: <https://lawreview.uchicago.edu/page/self-regulation-and-innovation-peer-peer-sharing-economy>
- Cohen, M., & Zehngbot, C.** (2014). "What's old becomes new: Regulating the sharing economy." *Boston Bar Journal*. Retrieved from: <http://bostonbarjournal.com/2014/04/01/whats-old-becomes-new-regulating-the-sharing-economy>
- Davis, J.** (2015). "Drive at your own risk: Uber violates unfair competition laws by misleading UberX drivers about their insurance coverage." *Boston College Law Review*, 56(3): 1097-1142. Retrieved from: <http://lawdigitalcommons.bc.edu/bclr/vol56/iss3/7>
- Dobson, E.** (2015). "Transportation network companies: How should South Carolina adjust its regulatory framework?" *South Carolina Law Review*, 66(701): 701-725.
- Greenblatt, J.B., & Shaheen, S.** (2015). "Automated vehicles, on-demand mobility, and environmental impacts." *Transportation*, 2(3): 74-81. Retrieved from: <http://link.springer.com/article/10.1007%2Fs40518-015-0038-5>
- Greenwood, B.N., & Wattal, S.** (2015). "Show me the way to go home: An empirical investigation of ride sharing and alcohol related motor vehicle homicide." Fox School of Business Research Paper No. 15-054. Retrieved from: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2557612
- Isaac, E.** (2014). "Disruptive innovation: Risk-shifting and precarity in the age of Uber." Berkeley Roundtable on the International Economy Working Paper 2014-7. Retrieved from: <http://www.brie.berkeley.edu/wp-content/uploads/2015/01/Disruptive-Innovation.pdf>
- Jenk, J.** (2015). "Theory meets practice in the taxi industry: Coase and Uber." MPRA Paper No. 63206. Retrieved from: <https://mpra.ub.uni-muenchen.de/63206>
- Kalmbach, Z.** (2015). The effect of ridesharing services on drunk driving. Unpublished undergraduate thesis. Texas: Texas A&M University. Retrieved from: <http://oaktrust.library.tamu.edu/handle/1969.1/154487>
- Kelly, A.** (2015). "Chapter 389: Closing the app gap with insurance requirements for transportation network companies." *McGeorge Law Review*, 46(1): 1-25. Retrieved from: <http://www.mcgeorge.edu/Documents/Publications/46206Water.pdf>
- King, D.A., Peters, J.R., & Daus, M.W.** (2012). "Taxicabs for improved urban mobility: Are we missing an opportunity?" Paper presented at the Transportation Research Board 91st Annual Meeting, Washington, DC. Washington, DC: Transportation Research Board. Retrieved from: <http://trid.trb.org/view.aspx?id=1129618>
- Mahesh, R.** (2015). "From jitney busses to app-based ridesharing: Understanding California's 'third way' approach to ride-for-hire regulation." *Southern California Law Review*, 88(4): 965-1020. Retrieved from: <http://lawreview.usc.edu/index.php/note-from-jitneys-to-app-based-ridesharing-californias-third-way-approach-to-ride-for-hire-regulation>
- Martin, E., Shaheen, S.A., & Lidicker J.** (2010). "Carsharing's impact on household vehicle holdings: Results from a North American shared-use vehicle survey." *Transportation Research Record: Journal of the Transportation Research Board*, 1986: 116-124. Retrieved from: <http://escholarship.org/uc/item/0850h6r5>
- McBride, S.** (2015). Ridesourcing and the taxi marketplace. Unpublished undergraduate thesis. Chestnut Hill: Boston College. Retrieved from: <http://dlib.bc.edu/islandora/object/bc-ir:104530>
- Oei, S., & Ring, D.M.** (2016). "Can sharing be taxed?" *Washington University Law Review*, 93(4). Retrieved from: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2570584
- Ranchordás, S.** (2013). "The whys and woes of experimental legislation." *The Theory and Practice of Legislation*, 1(3): 415-440. Retrieved from: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2604506
- _____. (2015). "Does sharing mean caring? Regulating innovation in the sharing economy." *Minnesota Journal of Law, Science & Technology*, 16(1): 1-63.
- Rassman, C.L.** (2014). "Regulating rideshare without stifling innovation: Examining the drivers, the

- insurance ‘gap,’ and why Pennsylvania should get on board.” *Journal of Technology Law & Policy*, 15(1): 81-100. Retrieved from: <http://tlp.law.pitt.edu/ojs/index.php/tlp/article/view/158>
- Rayle, L., Shaheen, S., Chan, N., Dai, D., & Cervero, R.** (2014). *App-based, on-demand ride services: Comparing taxi and ridesourcing trips and user characteristics in San Francisco*. Berkeley: University of California Transportation Center. Retrieved from: http://tsrc.berkeley.edu/sites/default/files/RidesourcingWhitePaper_Nov2014Update.pdf
- Rogers, B.** (2015). “The social costs of Uber.” *The University of Chicago Law Review*, 82: 85-102. Retrieved from: <https://lawreview.uchicago.edu/page/social-costs-uber>
- Salnikov, V., Lambiotte, R., Noulas, A., & Mascolo, C.** (2015). “OpenStreetCab: Exploiting taxi mobility patterns in New York City to reduce commuter costs.” arXiv:1503.03021. Retrieved from: <http://arxiv.org/abs/1503.03021>
- Santi, P., Resta, G., Szell, M., Sobolevsky, S., Strogatz, S.H., & Ratti, C.** (2014). “Quantifying the benefits of vehicle pooling with shareability networks.” *Proceedings of the National Academy of Science of the United States of America*, 111(37): 13290-13294. Retrieved from: <http://www.pnas.org/content/111/37/13290>
- Shaheen, S.** (2014). *Transportation network companies and ridesourcing: Comparing taxi and TNC/ridesourcing trips and user characteristics in San Francisco*. Berkeley: University of California Transportation Center. Retrieved from: http://www.cpuc.ca.gov/NR/rdonlyres/5C961222-B9C8-4E53-A54D-FC2A89C0A30C/0/RidesourcingCPUCShaheen_Final_v2.pdf
- Strong, K.C.** (2015). “When apps pollute: Regulating transportation network companies to maximize environmental benefits.” *University of Colorado Law Review*, 86(1049): 1049-1093. Retrieved from: http://lawreview.colorado.edu/wp-content/uploads/2015/07/12.-86.3-Strong_Final.pdf
- Sun, C., & Edara, P.** (2015). “Is getting an Uber-Lyft from a Sidecar different from hailing a taxi? The current dynamic ridesharing controversy.” *Transportation Research Record: Journal of the Transportation Research Board*, 2536: 60-66. Retrieved from: http://web.missouri.edu/~sunc/ridesharing_Sun_Edara_MU_revision.pdf
- Thebault-Spieker, J., Terveen, L., & Hect, B.** (2015). “Avoiding the south side and the suburbs: The geography of mobile crowdsourcing markets.” Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing. Retrieved from: <http://dl.acm.org/citation.cfm?id=2675278>
- Wang, A.** (2015). The economic impact of transportation network companies on the taxi industry. Unpublished undergraduate thesis. Claremont: Scripps College.
- Witt, A., Suzor, N., & Wikström, P.** (2015). “Regulating ride-sharing in the peer economy.” *Communication Research and Practice*, 1(2): 174-190. Retrieved from: <http://www.tandfonline.com/doi/full/10.1080/22041451.2015.1048041>

Media Articles

- Ahsan, S., & Hensley, L.** (2015, August 21). “Summer of Uber: Everything you need to know about the upstart ride-sharing service.” *The National Post*. Retrieved from: <http://news.nationalpost.com/news/canada/summer-of-uber-everything-you-need-to-know-about-the-upstart-ride-sharing-service>
- Brooks, J.** (2014, February 17). “UberX and Lyft disability access plans not wowing advocates.” *KQED News*. Retrieved from: <http://ww2.kqed.org/news/2014/02/17/lyft-uber-disabled>
- Caro, M.D.** (2014, September 22). “D.C. cab companies blame steep declines in revenue on ridesharing.” *WAMU 88.5*. Retrieved from: http://wamu.org/news/14/09/22/dc_cab_companies_pin_steep_declines_in_revenue_on_ridesharing
- CBC News.** (2014, October 14). “Uber Vancouver hiring fair goes on despite moratorium.” *CBC News*. Retrieved from: <http://www.cbc.ca/news/canada/british-columbia/uber-vancouver-hiring-fair-goes-on-despite-moratorium-1.2798663>
- CTV Montreal.** (2015, August 19). “Taxis in Quebec moving into the mobile era.” *CTV News Montreal*. Retrieved from: <http://montreal.ctvnews.ca/taxis-in-quebec-moving-into-the-mobile-era-1.2523994>

BIBLIOGRAPHY

- Dungca, N.** (2015, January 13). "In first, Uber to share ride data with Boston." *Boston Globe*. Retrieved from: <https://www.bostonglobe.com/business/2015/01/13/uber-share-ridership-data-with-boston/4Klo40KZREtQ7jkoaZjoNN/story.html>
- Ghose, C.** (2015, September 18). "Proposed statewide Uber regulations would nullify Columbus ordinance." *Columbus Business First*. Retrieved from: <http://www.bizjournals.com/columbus/news/2015/09/18/proposed-statewide-uber-regulations-would-nullify.html>
- Haas, K.** (2014, November 14). "Uber could have public partnership in Rockford." *Rockford Register Star*. Retrieved from: <http://www.rstar.com/article/20141114/NEWS/141119606>
- Harshbarger, R.** (2015, July 10). "Yellow cab trips declining in NYC, according to TLC data." *AM New York*. Retrieved from: <http://www.amny.com/transit/nyc-yellow-cab-trips-on-the-decline-uber-to-blame-1.10627001>
- Hawkins, A.J.** (2015, June 15). "Uber accuses mayor, City Council of trying to 'break it.'" *Crain's*. Retrieved from: <http://www.craigslist.com/article/20150625/BLOGS04/150629937/uber-accuses-mayor-city-council-of-trying-to-break-it>
- Jergler, D.** (2014, June 27). "Uber, Lyft, Sidecar toe-to-toe with insurers state-by-state." *Insurance Journal*. Retrieved from: <http://www.insurancejournal.com/news/national/2014/06/27/332942.htm>
- Hui, A.** (2015, September 9). "Toronto looks to update by-laws to recognize new technology like Uber." *The Globe and Mail*. Retrieved from: <http://www.theglobeandmail.com/news/toronto/lower-toronto-cab-fares-to-level-playing-field-with-uber-city-report-urges/article26272790>
- Hurd, R.D.** (2015, August 17). "Uber model leads to heightened risk of distracted driving." *The Legal Intelligencer*. Retrieved from: <http://www.thelegalintelligencer.com/id=1202734928114/Uber-Model-Leads-to-Heightened-Risk-of-Distracted-Driving?slreturn=20150915234603>
- Hurley, M.** (2015, July 9). "Two more Uber drivers charged; total now stands at 37." *Ottawa Citizen*. Retrieved from: <http://ottawacitizen.com/news/local-news/two-more-uber-drivers-charged-total-now-stands-at-37>
- MacMillan, D.** (2015, January 29). "Uber laws: A primer on ridesharing regulations." *Wall Street Journal*. Retrieved from: <http://blogs.wsj.com/digits/2015/01/29/uber-laws-a-primer-on-ridesharing-regulations>
- Hicks, N. & Rivoli, D.** (2015, August 16). "Taxi pickups plummet 10% to 77 million in first half of 2015: analysis." *NY Daily News*. Retrieved from: <http://www.nydailynews.com/new-york/taxi-pickups-plummet-77-million-2015-analysis-article-1.2327367>
- Klopf, R.** (2015, June 18). "Rockford considers regulations and fees for ride-sharing services like Uber." *WREX*. Retrieved from: <http://www.wrex.com/story/29357113/2015/06/18/rockford-considers-regulations-and-fees-for-ride-sharing-services-like-uber>
- Kwong, J.** (2014, November 17). "SF taxi decline debunked by cab companies." *SF Examiner*. Retrieved from: <http://archives.sfexaminer.com/sanfrancisco/sf-taxi-decline-debunked-by-cab-companies/Content?oid=2912179>
- _____. (2014, November 5). "SF cabdrivers officially join union, take aim at Uber, Lyft, Sidecar." *SF Examiner*. Retrieved from: <http://archives.sfexaminer.com/sanfrancisco/sf-cabdrivers-officially-join-union-take-aim-at-uber-lyft-sidecar/Content?oid=2911218>
- Lien, T.** (2015, March 18). "California taxis sue Uber, allege false advertising, unfair competition." *Los Angeles Times*. Retrieved from: <http://www.latimes.com/business/technology/la-fi-tn-taxi-uber-unfair-competition-lawsuit-20150318-story.html>
- Mackie, J.** (2015, July 30). "Car share numbers rev up in Vancouver as drivers take the wheel." *The Vancouver Sun*. Retrieved from: http://www.vancouversun.com/share+numbers+Vancouver+drivers+take+wheel/11252730/story.html?__lsa=e0d2-0966
- Macmillan, D., & Demos, T.** (2015, July 31). "Uber valued at more than \$50 billion." *The Wall Street Journal*. Retrieved from: <http://www.wsj.com/articles/uber-valued-at-more-than-50-billion-1438367457>
- Owram, K.** (2015, August 25). "Drivers beware: UberX drivers may find themselves without insurance in the event of an accident." *The National Post*. Retrieved from: <http://business.financialpost.com/news/transportation/driver-beware-uberx-drivers-may-find-themselves-without-insurance-in-the>

- event-of-an-accident
- Powers, M.** (2014, May 22). "Taxi drivers say Uber threatens their livelihoods." *Boston Globe*. Retrieved from: <https://www.bostonglobe.com/metro/2014/05/22/taxi-drivers-protest-uber-boston-offices/OYIRN0hHAHVhcxFIQ2X5aI/story.html>
- Richtel, M.** (2014, December 21). "Distracted driving and the risks of ride-hailing services like Uber." *The New York Times*. Retrieved from: <http://bits.blogs.nytimes.com/2014/12/21/distracted-driving-and-the-risks-of-ride-hailing-services-like-uber>
- Schelling, S.** (2012, November 28). "Uber town-car service shut down in Vancouver by B.C. Passenger Transportation Board." *The Georgia Straight*. Retrieved from: <http://www.straight.com/news/uber-town-car-service-shut-down-vancouver-bc-passenger-transportation-board>
- Simmons, A.** (2015, July 23). "MARTA pilots free Wi-Fi on buses and Uber partnership." *AJC*. Retrieved from: <http://commuting.blog.ajc.com/2015/07/23/marta-pilots-free-wi-fi-on-buses-and-uber-partnership>
- Soper, T.** (2015, June 11). "The Uber effect: Seattle taxi industry revenue dipped 28% in past 2 years." *GeekWire*. Retrieved from: <http://www.geekwire.com/2015/the-uber-effect-seattle-taxi-industry-revenue-dipped-28-in-past-two-years>
- Sovern, D.** (2014, January 16). "San Francisco taxi drivers migrate to rideshare services." *CBS SF Bay Area*. Retrieved from: <http://sanfrancisco.cbslocal.com/2014/01/16/san-francisco-cab-drivers-migrate-to-uber-other-car-services>
- Templeton, A. & Rosman, J.** (2015, May 18). "Uber's wheelchair-accessible option in Portland doesn't work 9-5." *OPB*. Retrieved from: <http://www.opb.org/news/article/ubers-wheelchair-accessible-option-in-portland-doesnt-work-9-to-5>
- The Canadian Press.** (2014, November 3). "Uber Vancouver to get undercover government checks to enforce taxi regulations." *CBC News*. Retrieved from: <http://www.cbc.ca/news/canada/british-columbia/uber-vancouver-to-get-undercover-government-checks-to-enforce-taxi-regulations-1.2821811>
- The Economist.** (2015, August 14). "Taxis v Uber: A tale of two cities." *The Economist*. Retrieved from: <http://www.economist.com/news/usa/21661016->
- [does-uber-substitute-cabs-or-attract-new-riders-it-depends-where-you-live-tale](http://www.economist.com/news/usa/21661016-does-uber-substitute-cabs-or-attract-new-riders-it-depends-where-you-live-tale)
- _____. (2015, August 10). "Taxis v Uber: Substitutes or complements?" *The Economist*. Retrieved from: <http://www.economist.com/blogs/graphicdetail/2015/08/taxis-v-uber>
- Willing, J.** (2015, October 5). "Uber makes 150,000 September trips across Ottawa." *Ottawa Sun*. Retrieved from: <http://www.ottawasun.com/2015/10/05/uber-makes-150000-september-trips-across-ottawa>
- WORT 89.9 fm.** (2015). "State lawmakers kill Madison's new Uber ordinance." *WORT 89.9*. Retrieved from: <http://www.wortfm.org/state-lawmakers-kill-madisons-new-uber-ordinance>

Websites - Government

- California Department of Motor Vehicles.** (2011). "Section 23123 Hand Held Wireless Telephone Prohibited Use" *California Department of Motor Vehicles*. Retrieved from: <https://www.dmv.ca.gov/portal/dmv/detail/pubs/vctop/vc/d11/c12/a1/23123>
- California Public Utilities Commission.** (2014). "Required Reports TNCs Must Provide the CPUC." *California Public Utilities Commission*. Retrieved from: <http://www.cpuc.ca.gov/PUC/Enforcement/TNC/TNC+Required+Reports.htm>
- City of Seattle.** (2015). "Municipal Code, Chapter 6.310 - Taxicab and for-hire vehicles." *City of Seattle*. Retrieved from: https://www.municode.com/library/wa/seattle/codes/municipal_code?nodet=TIT6BURE_SUBTITLE_IVNELICO_CH6.310TAFREVE_IGEP6.310.130LIRE&showChanges=true
- _____. (n.d.). "TNC drivers." *City of Seattle*. Retrieved from: <http://www.seattle.gov/business-regulations/taxis-for-hires-and-tncs/transportation-network-companies/tnc-drivers>
- Dallas Area Rapid Transit.** (2015, April 14). "DART, Uber stepping up "complete trip" efforts." *DART*. Retrieved from: <http://www.dart.org/news/news.asp?ID=1179>

BIBLIOGRAPHY

- Insurance Corporation of BC** (2015). "I want to use my vehicle to drive passengers for payment, for a service like Uber or Lyft. What kind of licence do I need?" *ICBC*. Retrieved from: <http://www.icbc.com/FAQ/Pages/Driver-licensing.aspx>
- Metro Transit**. (n.d.). "Guaranteed Ride Home." *Metro Transit*. Retrieved from: <http://www.metrotransit.org/guaranteed-ride-home>
- Metro**. (n.d.). "Guaranteed Ride Home." *Metro*. Retrieved from: <http://www.metro.net/riding/rideshare/grh>
- Province of BC**. (2015). "Motor Vehicle Act (RSBC 1996) Chapter 318, Part 3.1 — Use of Electronic Devices while Driving." *BC Laws*. Retrieved from: [http://www.bclaws.ca/civix/document/LOC/complete/statreg/--%20M%20--/47_Motor%20Vehicle%20Act%20\[RSBC%201996\]%20c.%20318/00_Act/96318_06.xml#section214.1](http://www.bclaws.ca/civix/document/LOC/complete/statreg/--%20M%20--/47_Motor%20Vehicle%20Act%20[RSBC%201996]%20c.%20318/00_Act/96318_06.xml#section214.1)
- Wisconsin Office of the Governor**. (2015, May 1). "Governor Scott Walker Signs Assembly Bill 143 Into Law." *Wisconsin: Office of the Governor*. Retrieved from: <http://walker.wi.gov/newsroom/press-release/governor-scott-walker-signs-assembly-bill-143-law>
- Websites - Non-Government**
- Drive Uber NYC**. (n.d.). "Vehicle requirements." *Drive Uber NYC*. Retrieved from: <http://www.driveubernyc.com/cars>
- Insurance Brokers Association of Ontario**. (2015, August 13). "Ontario brokers urge caution when using ridesharing programs." *Insurance Brokers Association*. Retrieved from: <http://www.ibao.org/ontario-brokers-urge-caution-when-using-ridesharing-programs>
- MacIssac & Company**. (2014). "Uber ridesharing can lead to uber insurance problems." *BC Injury Law*. Retrieved from: <http://bc-injury-law.com/blog/uber-ridesharing-lead-uber-insurance-problems>
- Uber**. (2015, September 8). "Intact Financial and Uber Working Together to Develop Innovative Ridesharing Insurance in Canada." *Uber Newsroom*. Retrieved from: <http://newsroom.uber.com/toronto/2015/09/innovative-ridesharing-insurance>
- _____. (2015, July 15). "Details on Safety." *Uber Newsroom*. Retrieved from: <https://newsroom.uber.com/2015/07/details-on-safety>
- _____. (2015, March 26). "Uber and Portland Metro's Public Transportation Working Together." *Uber Newsroom*. Retrieved from: <https://newsroom.uber.com/oregon/2015/03/uber-and-portland-metros-public-transportation-working-together>
- _____. (2015, January 13). "Driving Solutions to Build Smarter Cities." *Uber Newsroom*. Retrieved from: <https://newsroom.uber.com/boston/2015/01/driving-solutions-to-build-smarter-cities>
- _____. (2015). "Columbus uberX." *Uber*. Retrieved from: <http://drive.uber.com/oh/cities/columbus/p2p>
- _____. (2014, August 12). "The Pupdate Is In, Vancouver!" *Uber Newsroom*. Retrieved from: <http://newsroom.uber.com/vancouver-ca/2015/08/the-pupdate-is-in-vancouver>
- _____. (2014, July 17). "Welcome Us Back...But Only For Ice Cream Day." *Uber Newsroom*. Retrieved from: <http://newsroom.uber.com/vancouver-ca/2014/07/welcome-us-back-but-only-for-ice-cream-day>
- _____. (2014). "Vancouver Needs Uber!" *Uber Action*. Retrieved from: <https://action.uber.org/vancouver>
- _____. (2012, November 22). "Regulators Demanding Uber Vancouver Price Increase! We Need Your Help!" *Uber Newsroom*. Retrieved from: <http://newsroom.uber.com/2012/11/helpubervan>

APPENDIX A: MEETING RECORDS

Table 15. Internal City staff meetings.

Regulatory Preference	Commentary	Subject
2015-05-19	<ul style="list-style-type: none"> Paul Storer (Transportation) Paul Krueger (Transportation) Victor Ngo (GC Scholar) 	GCS Project Scoping
2015-05-28	<ul style="list-style-type: none"> Paul Storer (Transportation) Paul Krueger (Transportation) Victor Ngo (GC Scholar) 	GCS Project Scoping
2015-06-29	<ul style="list-style-type: none"> Doug Smith (Sustainability) Jennifer Wahl (Sustainability) Paul Storer (Transportation) Victor Ngo (GC Scholar) 	GCS Project Check-in
2015-07-10	<ul style="list-style-type: none"> Katie Dolling (UBC)* Jennifer Wahl (Sustainability) Victor Ngo (GC Scholar) GC/UBC Sustainability Scholars* 	GCS Project Presentation
2015-08-12	<ul style="list-style-type: none"> Jocelyn Bachus (Community Services) Thor Kuhlmann (Licensing) Paul Storer (Transportation) Paul Krueger (Transportation) Leslie Ng (Sustainability) Victor Ngo (GC Scholar) 	Project Executive Presentation Development
2015-08-21	<ul style="list-style-type: none"> Jocelyn Bachus (Community Services) Thor Kuhlmann (Licensing) Paul Storer (Transportation) Paul Krueger (Transportation) Leslie Ng (Sustainability) Victor Ngo (GC Scholar) 	Project Executive Presentation Development
2015-09-21	<ul style="list-style-type: none"> Katie Dolling (UBC)* Victor Ngo (GC Scholar) GC/UBC Sustainability Scholars* 	GCS Project Presentation

* External from the City of Vancouver.

APPENDIX A: MEETING RECORDS

Table 16. Key informant meetings.

Regulatory Preference	Commentary	Subject
2015-08-14	<ul style="list-style-type: none"> • Michael van Hemmen (Uber)* • Paul Storer (Transportation) • Victor Ngo (GC Scholar) 	Uber Discussion
2015-08-18	<ul style="list-style-type: none"> • Carolyn Bauer (Vancouver Taxi Association & Yellow Cab)* • Victor Ngo (GC Scholar) • Yellow Cab Staff* 	Yellow Cab Tour & Uber Discussion
2015-08-28	<ul style="list-style-type: none"> • Nickole Cheron (City of Portland)* • Kristin Vanderkuip (BC Passenger Transportation Branch) • Andreea Toma (Licensing) • Thor Kuhlmann (Licensing) • Sarah Hicks (Licensing) • Paul Storer (Transportation) • Doug Smith (Sustainability) • Leslie Ng (Sustainability) • Victor Ngo (GC Scholar) 	City of Portland's Experience with Uber
2015-09-24	<ul style="list-style-type: none"> • Julia Markovich (The Conference Board of Canada)* • Thor Kuhlmann (Licensing) • Victor Ngo (GC Scholar) 	Uber Research

* External from the City of Vancouver.

APPENDIX B: CITY 3-1-1 CASES

Table 17. 3-1-1 cases relating to Uber from January 1, 2012 to August 31, 2015.

Date	Case Type	Comment
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**THIS SECTION IS NOT AVAILABLE IN THE
PUBLIC VERSION OF THE REPORT.**

APPENDIX C: MEDIA COVERAGE OF UBER IN VANCOUVER

Table 18. Media coverage of Uber in Vancouver from November 2012 to July 2015.

Date	Case Type	Comment	URL
2012-11-28	<i>Georgia Straight</i>	Uber town-car service shut down in Vancouver by B.C. Passenger Transportation Board	http://www.straight.com/news/uber-town-car-service-shut-down-vancouver-bc-passenger-transportation-board
2014-09-28	<i>Globe and Mail</i>	Car-hiring operation Uber seeks to return to Vancouver	http://www.theglobeandmail.com/news/british-columbia/car-hiring-operation-uber-seeks-to-return-to-vancouver/article20822761
2014-09-30	<i>Abby News</i>	Taxi 'turmoil' ahead as Uber eyes Vancouver market	http://www.abbynews.com/business/277679391.html
2014-10-06	<i>Global News BC</i>	City of Vancouver puts a six-month moratorium on ride-share program Uber	http://globalnews.ca/news/1601801/city-of-vancouver-puts-a-six-month-moratorium-on-ride-share-program-uber
2014-10-10	<i>CBC News BC</i>	Test driving Uber in Seattle: Could it work in Vancouver?	http://bc.ctvnews.ca/test-driving-uber-in-seattle-could-it-work-in-vancouver-1.2049471
2014-10-30	<i>CTV News BC</i>	Uber rumoured to be launching in Vancouver on Halloween	http://bc.ctvnews.ca/uber-rumoured-to-be-launching-in-vancouver-on-halloween-1.2079937
2014-11-04	<i>BC Local News</i>	Uber responds to lawsuit, calls Vancouver Taxi Association a 'cartel'	http://www.bclocalnews.com/business/281531521.html
2014-11-04	<i>Vancity Buzz</i>	Vancouver taxi companies suing Uber ahead of launch	http://www.vancitybuzz.com/2014/11/vancouver-taxi-companies-suing-uber-ahead-launch
2014-11-04	<i>Canadian Business</i>	Taxi companies file lawsuit to block Uber from expanding into Vancouver	http://www.canadianbusiness.com/business-news/taxi-companies-file-lawsuit-to-block-uber-from-expanding-into-vancouver
2014-11-07	<i>CTV News BC</i>	Uber circulates petition to bring Uber to Vancouver	http://bc.ctvnews.ca/uber-circulates-petition-to-bring-uber-to-vancouver-1.2092469
2014-11-14	<i>CTV News BC</i>	Uber petition latest volley against taxi 'cartel'	http://www.surreyleader.com/business/282182601.html
2014-11-24	<i>CTV News BC</i>	Taxi cartel's long history of underserving public comes home to roost	http://www.theprovince.com/life/Michael+Smyth+Taxi+cartel+long+history+underserving+public+comes+home+roost/10403518/story.html
2015-01-08	<i>BurnabyNow</i>	It's time to let Uber operate	http://www.burnabynow.com/opinion/your-letters/it-s-time-to-let-uber-operate-1.1724994
2015-01-09	<i>Times Colonist</i>	Uber seeks to have lawsuit filed by Vancouver taxi companies thrown out	http://www.timescolonist.com/uber-seeks-to-have-lawsuit-filed-by-vancouver-taxi-companies-thrown-out-1.1726539
2015-01-09	<i>CBC News BC</i>	Uber wants lawsuit filed by Vancouver taxi companies thrown out	http://www.cbc.ca/news/canada/british-columbia/uber-wants-lawsuit-filed-by-vancouver-taxi-companies-thrown-out-1.2896173
2015-01-11	<i>Globe and Mail</i>	Uber 'eager' to return to Vancouver	http://www.theglobeandmail.com/news/british-columbia/uber-eager-to-return-to-vancouver/article22409093
2015-01-20	<i>Vancouver Courier</i>	Opinion: It's time to fix our broken taxi system	http://www.vancourier.com/opinion/columnists/opinion-it-s-time-to-fix-our-broken-taxi-system-1.1737171
2015-01-28	<i>The Province</i>	Value of cab licences plummeting over Uber uncertainty, says Vancouver Taxi Association	http://www.theprovince.com/Vancouver+Taxi+Association+Value+licences+plummeting+over+Uber+uncertainty/10768554/story.html

APPENDIX C: MEDIA COVERAGE OF UBER IN VANCOUVER

Table 18 (continued). Media coverage of Uber in Vancouver from November 2012 to July 2015.

Date	Case Type	Comment	URL
2015-01-30	<i>Georgia Straight</i>	Reasonable Doubt: Uber brings public debate and legal issues to Vancouver	http://www.straight.com/news/817606/reasonable-doubt-uber-brings-public-debate-and-legal-issues-vancouver
2015-03-11	<i>Vancouver Sun</i>	Supreme court ruling holds brakes on suburban cabs in downtown Vancouver	http://www.vancouversun.com/health/Supreme+court+uling+holds+brakes+suburban+cabs+downtown
2015-03-11	<i>24 Hours Vancouver</i>	Suburban taxis lose bid to enter Vancouver	http://vancouver.24hrs.ca/2015/03/11/suburban-taxis-lose-bid-to-enter-vancouver
2015-03-19	<i>CBC News BC</i>	Burnaby eyes Uber service despite continued ban in Vancouver	http://www.cbc.ca/news/canada/british-columbia/burnaby-eyes-uber-service-despite-continued-ban-in-vancouver-1.3001236
2015-03-19	<i>Metro News Vancouver</i>	Uber delay: Vancouver to extend taxi licence freeze by seven months	http://metronews.ca/news/vancouver/1318022/uber-delay-vancouver-to-extend-taxi-licence-freeze-by-seven-months
2015-03-19	<i>News 1130</i>	What kind of background checks do Uber drivers have to undergo?	http://www.news1130.com/2015/03/19/what-kind-of-background-checks-do-uber-drivers-have-to-undergo
2015-03-20	<i>Global News BC</i>	Little change expected for Vancouver's taxi industry anytime soon	http://globalnews.ca/news/1893441/little-change-coming-to-vancouvers-taxi-industry-anytime-soon
2015-03-23	<i>CBC News BC</i>	Uber lawsuit dropped by Vancouver taxi companies	http://www.cbc.ca/news/canada/british-columbia/uber-lawsuit-dropped-by-vancouver-taxi-companies-1.3006338
2015-03-23	<i>Vancity Buzz</i>	Vancouver taxi companies drop lawsuit against Uber	http://www.vancitybuzz.com/2015/03/vancouver-taxi-companies-drop-lawsuit-uber
2015-03-24	<i>CBC News BC</i>	Uber faces more delays in Vancouver	http://www.cbc.ca/news/canada/british-columbia/uber-faces-more-delays-in-vancouver-1.3006568
2015-03-26	<i>Lanagara Voice</i>	South Van taxi company urges other drivers to sign anti-Uber petition	http://www.langaravoice.ca/2015/03/26/south-van-taxi-company-urges-other-drivers-to-sign-anti-uber-petition
2015-03-31	<i>Georgia Straight</i>	Uber alternatives promote ride-sharing in Vancouver	http://www.straight.com/life/421066/uber-alternatives-promote-ride-sharing-vancouver
2015-03-31	<i>Surrey Leader</i>	Transport 'revolution' could make transit obsolete: think tank	http://www.surreyleader.com/news/298208941.html
2015-04-05	<i>Vancouver Sun</i>	Uber tries to make peace with Vancouver foes	http://www.vancouversun.com/news/Uber+tries+make+peace+with+Vancouver+foes/10947694/story.html
2015-04-05	<i>The Province</i>	Amid mixed messages, Uber has no plans to give up on Canada	http://www.theprovince.com/news/Amid+mixed+messages+Uber+plans+give+Canada/10947162/story.html
2015-04-13	<i>Huffington Post</i>	Services Like Uber Leave Metro Vancouver's Transit Plan in the Past	http://www.huffingtonpost.ca/kenneth-p-green/metro-vancouver-transit_b_7056680.html
2015-04-23	<i>News 1130</i>	Is it time to give Uber a test run in Vancouver?	http://www.news1130.com/2015/04/23/is-it-time-to-give-uber-a-test-run-in-vancouver
2015-04-30	<i>News 1130</i>	Uber argues new luxury sedan service Ripe won't change Vancouver market	http://metronews.ca/news/vancouver/1356271/uber-argues-new-luxury-sedan-service-ripe-wont-change-vancouver-market
2015-05-14	<i>News 1130</i>	Vancouverites still want Uber in the city despite controversy: expert	http://www.news1130.com/2015/05/14/vancouverites-still-want-uber-in-the-city-despite-controversies-expert

APPENDIX C: MEDIA COVERAGE OF UBER IN VANCOUVER

Table 18 (continued). Media coverage of Uber in Vancouver from November 2012 to July 2015.

Date	Case Type	Comment	URL
2015-05-31	<i>24 Hours Vancouver</i>	Burnaby pumps the brakes on Uber	http://vancouver.24hrs.ca/2015/05/31/burnaby-pumps-the-brakes-on-uber
2015-06-10	<i>Georgia Straight</i>	Regular taxi delays make Uber fan out of passenger	https://www.straight.com/news/467496/regular-taxi-delays-make-uber-fan-out-passenger
2015-07-03	<i>CKNW</i>	Uber's win in Ontario may spark another in other provinces	http://www.cknw.com/2015/07/03/82692
2015-07-04	<i>Georgia Straight</i>	Uber cheers Ontario court ruling but remains shut out of Vancouver	https://www.straight.com/news/483511/uber-cheers-ontario-court-ruling-remains-shut-out-vancouver
2015-07-04	<i>CKNW</i>	BC Taxi Association not happy with Uber's victory in Ontario	http://www.cknw.com/2015/07/04/bc-taxi-association-not-happy-with-ubers-victory-in-ontario
2015-07-24	<i>BC Business</i>	Why Vancouver has been slow to adopt the sharing economy	http://www.bcbusiness.ca/tech-science/why-vancouver-has-been-slow-to-adopt-the-sharing-economy

Note: List is not comprehensive of all media articles.

APPENDIX D: PASSENGER TRANSPORTATION BOARD'S INDUSTRY NOTICES

Subject: Regulatory Concerns Associated with the Use of Smartphone Applications (Apps) and Non-compliance with Passenger Rates
Date: November 23, 2012

Smartphone Apps are facilitating the booking of passenger transportation services. These apps connect passengers with limousines or taxis immediately. The industry has raised concerns about Smartphone Apps that advertise rates that have not been approved by the Passenger Transportation Board (Board).

Some operators/drivers may be independently providing passenger transportation services through Smartphone Apps and charging passenger rates that have not been approved by the Board. The charging or collecting of rates that have not been approved is of concern to the industry, the Board and the Passenger Transportation Branch. It is contrary to the Passenger Transportation Act, undermines rate structures in place and could result in destructive competition.

The Registrar of Passenger Transportation (Registrar) is accountable for the enforcement and compliance of the Passenger Transportation Act, including imposing sanctions and penalties.

A licensee is required to maintain care and control of every commercial passenger vehicle and driver operating under their licence. If a licensee is not in compliance with its rates, the Registrar may take one or more of the following actions:

- a. order that the licensee's licence be suspended for any period the Registrar considers necessary;
- b. make an order prohibiting the licensee from doing one or more of the following:
 - i. transferring the licence to another person;
 - ii. amending the licence;
 - iii. replacing the licence;
 - iv. renewing the licence;
 - v. obtaining a new licence;

- c. order the licensee to stop operating one or more motor vehicles under the authority of a licence and, subject to subsection (1.1), to
 - i. return, in the manner prescribed by the regulations, the special authorization vehicle identifiers and the vehicle identification certificates issued in relation to those motor vehicles, and
 - ii. remove from or cease displaying on each motor vehicle the general authorization vehicle identifier assigned by the licence in respect of that motor vehicle;
- c. order that the licensee's licence be cancelled;
- d. make an order imposing an administrative fine on the licensee.

Information on Board approved rates is available on the Board's website at <http://www.th.gov.bc.ca/ptb/rates.htm>.

You can also find information about filing a change of rates application on the Registrar's website at http://www.th.gov.bc.ca/rpt/licence_existing.htm.

Please call the Passenger Transportation Branch Duty Inspector at 604-453-4250 if you have any questions.

APPENDIX D: PASSENGER TRANSPORTATION BOARD'S INDUSTRY NOTICES

Subject: Passenger Transportation Rates and Smartphone Applications (Apps)

Date: November 28, 2012

- In British Columbia, taxis, limousines and other for hire transportation providers must have a passenger transportation licence.
- If a vehicle seats 11 passengers or fewer plus a driver, then the company needs a licence with a "Special Authorization". This licence is approved by the Passenger Transportation Board, an independent tribunal. The licence defines where the licensee may operate. The Board also approves passenger rates.
- "Apps" for smartphones are now being used to connect passengers and commercial transportation operators. Licence holders who use smartphone apps must ensure that they advertise and charge their approved rates.
- Private companies promoting the use of apps in B.C. are encouraged to research licensing requirements and rates to ensure they understand the regulatory environment and to avoid misinforming the public.
- The Registrar of Passenger Transportation, Ministry of Transportation & Infrastructure is accountable for the enforcement and compliance of the Passenger Transportation Act, including imposing sanctions and penalties on licence holders. [See [Registrar's Notice](#).]
- In the Lower Mainland, taxis operate on metered rates and limousines operate on hourly rates. Since July 1, 2011, limousine operators in the Lower Mainland have operated under a minimum/maximum rate structure. For sedan limousines, the minimum rate is \$75 per hour and the maximum rate is \$150. The minimum charge is one hour. The maximum permitted discount is up to 15%. These rates were established through consultation with the limousine industry. [See the Board's [Limousine Rates](#) webpage.]
- Regulation of rates provides stability and safety in the passenger transportation industry. It maintains a distinction between limousines and taxis. It helps to ensure that vehicles are safe.
- Operators who want to provide a new limousine service or change their rates, may make an application to the Passenger Transportation Board.
- The Board publishes all applications, considers submissions from the public and makes a decision according to its mandate set out in the Passenger Transportation Act, i.e. Whether (a) there is a public need for the service; (b) the applicant is fit and proper and capable of providing the service and (c) the application, if approved, will promote sound economic conditions in the passenger transportation business.

APPENDIX E: UBER'S PETITION TO OPERATE IN VANCOUVER

<https://action.uber.org/vancouver>

Dear Vancouver & BC Leaders, Vancouver needs Uber!

British Columbia and Vancouver are home to the quintessential winter playground, shining examples of liveable cities, and a launching pad for countless innovators and trailblazers across many industries.

That's why so many residents are disappointed by Vancouver's limited transportation options. To make matters worse, the Province of British Columbia, at the behest of the taxi industry, isn't putting consumers first or thinking about how new innovations can create better transit solutions for all.

The ridesharing industry is a very new one, but cities all over the world are embracing it as a way to address the shortcomings of mass transit, reduce congestion and emissions, connect previously isolated neighborhoods, and overall bring cities together in a way never before imagined. **These are benefits that people are experiencing right now in more than 220 cities around the world — but Vancouver isn't among them.**

Why?

The taxi industry is hard at work to shut out innovators like Uber and preserve their cartel. With the lowest number of taxis per capita in North America, Vancouver residents and visitors are woefully underserved when it comes to transportation options. While consumers are left stranded, the government continues to protect taxi interests under the guise of maintaining "industry health" **a stated goal** of the Passenger Transportation Board (PTB), and preventing "destructive competition," as cited in countless **PTB decisions** as reason for denying applications that would bring more supply, choice and competition to the market. **Why do a select few rich taxi owners get the sworn protection of government agencies that are supposed to serve the public?**

This is your chance to send a message to Vancouver and British Columbia officials that everyone deserves a new set of transportation choices.

- **Riders** love Uber because the taxi industry doesn't come close to offering the same convenience and reliability
- **Drivers** love Uber because it provides higher earnings, unparalleled flexibility (be your own boss!) and increased safety on the road thanks to our cashless technology
- **Cities** love Uber because it connects residents and visitors to a ride when they need one, serves neighborhoods that taxis continuously neglect, reduces DUI incidents and fatalities, and decreases congestion and pollution by taking unnecessary vehicle traffic off the road

Stand up for choice in Vancouver and sign the petition — because a bold and innovative city like Vancouver deserves bold and innovative solutions like Uber. Let your voice be heard! #VancUBER

APPENDIX E: UBER'S PETITION TO OPERATE IN VANCOUVER

TO BC Ministry of Transportation and Infrastructure
Passenger Transportation Board of British
Columbia
Province of British Columbia
Vancouver City Council

Dear [Recipient's name],

As someone who values choices in transportation, I urge you to welcome Uber in Vancouver and British Columbia.

The existing taxi market does not meet consumer needs in terms of reliability, safety or convenience.

Cities around the world are embracing ridesharing as a 21st century solution to problems of congestion, traffic and emissions, but the benefits of the Uber platform extend way beyond that. Consumers love Uber because its technology helps connect them to the safest and most reliable rides on the road. Drivers love Uber because the platform allows for increased earnings and total work flexibility. Cities love Uber because ridesharing provides entrepreneurial opportunities, decreased DUI fatalities, and better service in traditionally underserved neighborhoods.

The local taxi interests are fixated on finding ways to block the introduction of this new and desperately needed technological advancement in Vancouver and British Columbia — at the expense of consumer choice and safety.

I ask that you recognize the merits of new technological innovation and work with -- rather than against -- Uber to bring more transportation choices to Vancouver. We are people looking for entrepreneurship opportunities, people regularly underserved by current transportation options, and people simply looking for a safe ride home on a Saturday night; we ask that you please empower our right to choose!

Thank you.

Sincerely,
[Your first name] [Your last name] from postal code
[Postal Code]

APPENDIX F: JURISDICTIONS IN THE UNITED STATES WITH REGULATIONS

The following list shows jurisdictions in the United States that have adopted regulations for ridesourcing as of August 2015.

State

- Arizona
- Arkansas
- California
- Colorado
- Delaware (Memorandum of Understanding)
- Georgia
- Idaho
- Illinois
- Indiana
- Kansas
- Kentucky
- Maine
- Maryland
- Montana
- Nebraska
- Nevada
- North Dakota
- Oklahoma
- Pennsylvania (Statewide opinion)
- South Carolina
- Tennessee
- Utah TNC
- Virginia
- Wisconsin
- Louisiana (Insurance only bill)
- Minnesota (Insurance only bill)
- Texas (Insurance only bill)
- Washington (Insurance + accessibility bill)

Municipalities

- Allegheny County Opinion
- Austin, TX
- Baton Rouge, LA
- Chattanooga, TN
- Chicago, IL
- Cincinnati, OH
- Columbus, OH
- Dallas, TX
- Detroit, MI
- Houston, TX
- Kansas City, MO
- King County, WA
- Milwaukee, WI
- Minneapolis, MN
- New Orleans, LA
- Oklahoma City, OK
- Portland, Oregon
- San Antonio, TX
- San Marcos, TX
- Seattle, WA
- Spokane, WA (Terms of agreement)
- St. Paul, MN
- Tulsa, OK
- Vancouver, WA
- Washington, DC

APPENDIX G: EXAMPLE DATA SHARING AGREEMENTS

Jurisdiction:

State of California

Link:

<http://www.cpuc.ca.gov/PUC/Enforcement/TNC/TNC+Required+Reports.htm>

Requirement:

Report on Providing Service By Zip Code:

- Date of all Requests: accepted or not accepted—Date (day,month,year)
- Time of all Requests: accepted or not accepted—Time
- Each Accepted Request—Zip Code of Where the Ride Began; Zip Code of Where the Ride Ended; Miles Traveled; Amount Paid/Donated
- Each Ride Requested but Not Accepted—Zip Code; If not Accepted, Provide Explanation

Report on Hours Logged by Drivers:

- Month
- Vehicle Identification Number (VIN #)
- Driver Name (last, first initial)
- Number of hours day of each Driver Spent Driving

Report on Miles Logged by Drivers:

- Month
- Vehicle Identification Number (VIN #)
- Driver Name (last, first initial)
- Number of miles day of each Driver Spent Driving

Annual Report on Providing Accessible Vehicles:

- Total # of Requested Rides (all types) (by month)
- Number of Hours an Accessible vehicle is available per month
- Number of accessible vehicles
- Total Number of Customer Requests for Accessible Vehicles
- Total Percentage (%) of Customer Requests for Accessible Vehicles
- Total Number of fulfilled Accessible Vehicle Requests

Annual Report on Driver Violations/Suspensions:

- Date of incident/accident
- Time of incident/accident
- Date Complaint Filed (month/day/year)
- Complaint Name and/or Number
- Waybill No. Associated with Incident
- Vehicle Identification Number (VIN #)
- Name of Driver (last, first initial)
- Outcome or status of investigation of each collision and/or Zero Tolerance Complaint. Specify the following: a brief description of the collision or complaint and who, if anyone, was
 1. cited
 2. ticketed
 3. had their license suspended
 4. found to be a primary collision factor [on a CHP form 555 or similar form]
 5. found guilty [by verdict or plea] by a criminal court, and/or
 6. found liable by a civil court or through arbitration. If criminal or civil proceeding(s) are in progress, state the venue, Court file number and status of those proceedings
- Amount paid, if any, to any party in each incident reported on this spreadsheet
- Amount Paid by Driver's Insurance
- Amount Paid by TNC's insurance
- Amount Paid by any other Source

APPENDIX G: EXAMPLE DATA SHARING AGREEMENTS

Jurisdiction:

City of Chicago

Link:

http://www.cityofchicago.org/content/dam/city/depts/bacp/rulesandregs/tnp_ord_clerk9115etal.pdf

Requirement:

9-115-210 Records and reports.

- a. Every licensee shall keep accurate books and records of account of the licensee's operations at the licensee's place of business in the city for a minimum of three years. Such records shall be submitted for inspection upon the request of the commissioner. Such records shall also be maintained in accordance with section 3-4-170 of this Code, and shall be produced in an electronic format or any other format required by the city.
- b. Each licensee shall provide the following data to the commissioner, at such times and in a format and manner prescribed by the commissioner in rules and regulations:
 1. the number and percentage of the licensee's customers within the city who requested wheelchair accessible vehicles and the number of filled requests;
 2. the number and percentage of rides requested and accepted, and the number of rides requested and not accepted, by the licensee's drivers, organized according to the geographic parameters and time frames specified by the commissioner;
 3. information on any of the licensee's drivers who were alleged to have committed a violation of this chapter or their terms of service or who have been suspended or banned from driving for the licensee, including any

zero-tolerance complaints and the outcome of the investigation into those complaints;

4. information on any accident or other incident that involved the licensee's driver and that was reported to the licensee, the cause of the incident, and the amount paid, if any, for compensation to any party in each incident. The report will contain information as to the date of the incident, the time of the incident, and the amount that was paid pursuant to the licensee's insurance policy. Also, the report will provide the total number of incidents involving the licensee's driver during the year;
 5. the average and mean number of hours and miles each of the licensee's drivers spent driving for the licensee; and
 6. only for purposes of law enforcement or emergency response, real-time tracking of the licensee's drivers and vehicles, including access to the driver's identifying information, GPS location data, and whether or not the driver is engaged with a passenger. If specialized hardware or software is required for real-time tracking, the licensee shall provide the specialized hardware or software to the City.
3. Nothing provided in this section shall be construed to require licensees to provide personally identifiable passenger information to the city.

APPENDIX G: EXAMPLE DATA SHARING AGREEMENTS

Jurisdiction:
City of Seattle

Link:
https://www.municode.com/library/wa/seattle/codes/municipal_code?nodet=TIT6BURE_SUBTITLE_IVNELICO_CH6.310TAFREVE_VENSTRA_6.310.540RERE

Requirement:
6.310.540 - Reporting responsibilities

- A. A. Transportation Network Companies, Taxi Associations, and For-Hire vehicle companies shall maintain accurate and complete operational records as provided by for-hire drivers, taxicab and for-hire vehicle licensees, and TNC endorsement holders in subsection 6.310.540E for two years, including, but not limited to:
 1. Total number of rides provided by each taxi or for-hire vehicle license holder or individual Transportation Network Company;
 2. Type of dispatch for each ride (hail, phone, app, etc.)
 3. Percentage or number of rides picked up in each zip code;
 4. Pick up and drop off zip codes of each ride;
 5. Percentage by zip code of rides that are requested but unfulfilled; (phone or app only)
 6. Number of collisions; including the name and number of the affiliated TNC, taxicab, and for-hire driver, collision fault, injuries, and estimated damage;
 7. Number of requested rides for an accessible vehicle;
 8. Crimes against driver reports;
 9. Passenger complaints; and
 10. Any other data identified by the Director to ensure compliance.
- B. Records may be maintained electronically.
- C. On a quarterly basis, Transportation Network Companies, Taxi Associations, and For-Hire Vehicle Companies must submit complete data to the Director via electronic reporting forms made available by the Director. (Class C)
- D. If a public records request is made of the City for documents that have been designated by the providing party as confidential or proprietary, the City shall provide third party notice to the providing party prior to disclosure.
- E. For-hire drivers, taxicab and for-hire vehicle licensees, and TNC endorsement holders must provide full and accurate information per Section 6.310.540.A to transportation network companies, taxi associations, and for-hire vehicle companies on a weekly basis. (Class A - each requirement)

APPENDIX H: EXAMPLE RESEARCH SURVEY QUESTIONNAIRES

Jurisdiction:

City of Toronto

Subject:

Public Input on Uber

Survey:

In July 2015, City Council directed staff to undertake a review of the operations of Uber and technologies like it in Toronto. Among other things, this work includes understanding the interests of the public in the technology and services that Uber provides. The findings of this research will result in a report, expected at the September 18, 2015 meeting of the Licensing and Standards Committee. The comments you provide will be included as input into this review process.

Information will be collected until August 14, 2015.

If you prefer to give your feedback by phone, email or on a paper survey, please be advised that the names, email addresses and phone numbers of the respondents are collected under the legal authority of The City of Toronto Act, S.O. 2006, Chapter 11. Schedule A, s. 136 (c). The information will not be shared and recorded in the City database. The information will be used solely to communicate with the respondents for the purpose of conducting the survey. Questions about this collection or the survey can be directed to:

Vanessa Fletcher
Project Manager, Taxi Review
City of Toronto, Toronto City Hall, 100 Queen Street West, 16th Floor, West Tower, M5H 2N2
Office of the Executive Director, Municipal Licensing & Standards
Telephone: (416) 3929830
Email: vfletch@toronto.ca
Website: www.toronto.ca/taxi

Please do not include any personal information in this survey.

Survey format and blank spaces

Depending on what you answer, different questions are shown, and you may see large blank spaces depending

on your web browser. Please skip past any spaces and ensure you hit Submit at the end of your survey.

1. What are the first three digits of your postal code?

2. What is your gender?

- Male
- Female
- Other, please specify...

3. What is your age?

- Under 15
- 15-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65-74
- 75-84
- 85+

4. Which types of services you use?

Please check all that apply.

- Taxicabs
- Limousines
- Uber

5. The City of Toronto regulates taxicab fares. What do you think should happen to these fares?

Please select one answer.

- Taxis should have consistent and metered regulated fares
- Taxis should have variable fares that fluctuate based on demand

6. Please rate your agreement with the following statements.

Strongly agree; agree; neutral/ no opinion; disagree; strongly disagree

- It is important that taxicabs in Toronto are licensed by the City of Toronto
- I want the City of Toronto to mandate adequate insurance of taxicabs
- I want the City of Toronto to verify adequate insurance of taxicabs

APPENDIX H: EXAMPLE RESEARCH SURVEY QUESTIONNAIRES

- I want the City of Toronto to mandate cameras in taxicabs
- I want the City of Toronto to regulate taxi fares Toronto taxicabs should be wheelchair accessible
- The City of Toronto should investigate when I have a complaint about a taxicab
- The City of Toronto should train taxi drivers
- Uber drivers should be required to follow the same regulations as taxi drivers in the City of Toronto
- Uber should charge the same amount of money for trips as taxi services
- Regulations for taxi services should be relaxed to let taxis compete with Uber
- Uber should be allowed to operate in the City of Toronto, even if these services are not regulated as much as taxis
- People should be able to choose for themselves whether they want to use Uber or taxi services
- The City of Toronto should perform criminal background checks for taxi drivers
- The City of Toronto should perform criminal background checks for Uber drivers

this review process. We invite you to learn more at www.toronto.ca/taxi.

7. Which of the following two statements are closest to your point of view?

Please select one answer.

- Some people say that the same rules and regulations that apply to taxi services should apply to Uber, in order to ensure that the same standards and regulations apply to both services and to ensure that customers are sufficiently protected.
- Other people say that Uber does not need to be as regulated as taxi services and ultimately it is the responsibility and choice of the customer to decide if they want to use either Uber or a taxi service.

8. Please provide any additional comments you may have.

Type here.

Thank you for taking the time to complete this survey. The comments you provide will be included as input into

APPENDIX H: EXAMPLE RESEARCH SURVEY QUESTIONNAIRES

Jurisdiction:

City of Toronto

Subject:

Industry Input on Uber

Survey:

In July 2015, City Council directed staff to undertake a review of the operations of Uber and technologies like it, and to examine the benefits and impacts on the taxicab and limousine industries. This work also includes outreach to the general public.

The findings of this research will result in a report, expected at the September 18, 2015 meeting of the Licensing and Standards Committee.

The comments you provide will be included as input into this review process. Information will be collected until August 14, 2015.

If you prefer to give your feedback by phone, email or on a paper survey, please be advised that the names, email addresses and phone numbers of the respondents are collected under the legal authority of The City of Toronto Act, S.O. 2006, Chapter 11. Schedule A, s. 136 (c). The information will not be shared and recorded in the City database. The information will be used solely to communicate with the respondents for the purpose of conducting the survey. Questions about this collection or the survey can be directed to:

Vanessa Fletcher
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City of Toronto, Toronto City Hall, 100 Queen Street West, 16th Floor, West Tower, M5H 2N2
Office of the Executive Director, Municipal Licensing & Standards
Telephone: (416) 3929830
Email: vfletch@toronto.ca
Website: www.toronto.ca/taxi

Please do not include any personal information in this survey.

Survey format and blank spaces

Depending on what you answer, different questions are shown, and you may see large blank spaces depending on your web browser. Please skip past any spaces and ensure you hit Submit at the end of your survey.

1. What are the first three digits of your postal code?
2. What is your gender?
 - Male
 - Female
 - Other, please specify...
3. What is your age?
 - Under 15
 - 15-24
 - 25-34
 - 35-44
 - 45-54
 - 55-64
 - 65-74
 - 75-84
 - 85+
4. Please select all that apply to you.
 - I am a taxicab driver
 - I am a taxicab owner
 - I am a limo driver
 - I am a limo owner
 - I am a taxicab brokerage
 - I am a limousine service company
 - I am a garage/fleet
 - I am a designated agent
 - I am an Uber driver, such as with UberX, UberSelect, or UberPool driver
 - I have a different relationship to the taxicab industry: Type here.
5. Why do you think the public use Uber services?
Please rank the reasons from most important to least important. 1=most important; 6=least important.
 - Uber can charge a lower fare
 - The technology makes it easier to order a taxi
 - The public have a bad opinion of the taxi/limo industry
 - The public like that they can rate the driver
 - The technology provides more safety tools

APPENDIX H: EXAMPLE RESEARCH SURVEY QUESTIONNAIRES

- The public wants to be able to use their credit card

6. Do you feel that City of Toronto regulation is impacting your ability to compete with Uber?

- Yes
- No

7. Please explain your answer.

Type here.

8. Please indicate your level of agreement to the following statements. Toronto should:

Strongly agree; agree; no opinion/ neutral; disagree; strongly disagree

- Regulate fares charged by UberX, UberXL and UberSelect drivers
- Limit the number of UberX, UberXL and UberSelect drivers allowed to operate in Toronto
- Stop all Uber services in Toronto
- Stop UberX, UberXL, and UberSelect
- Perform police background checks on Uber drivers
- Monitor and ensure that adequate insurance is in place for Uber drivers
- Permit Uber services, but only if they fall within existing regulations
- Change regulations to permit Uber to operate

9. What do you think the City should change in its regulation of the taxicab industry?

Please check any statements you agree with.

- Toronto should not regulate the fares/tariff
- Toronto should not regulate the type of vehicles
- Toronto should not regulate equipment (cameras, tires, etc)
- Toronto should not limit taxicab ownership/licence issuance
- Other, please specify...

10. Overall, how have the operations of Uber in Toronto negatively or positively impacted you?

Type here.

TAXICAB INDUSTRY SECTION

11. How do you operate your taxicab?

Please select one answer.

- I pay a shift rental rate
- I pay a lease fee for my taxicab
- I own my taxicab and drive it
- I own my taxicab but do not drive it

12. Please indicate your level of agreement to the following statements.

- The City of Toronto initial 17-day taxicab driver training is important
- The City of Toronto refresher taxicab training is important
- The City of Toronto regulated taxicab fares should decrease
- The City of Toronto shouldn't regulate taxicab fares
- Owner-operated taxicabs are better for the industry
- People should only be able to own one taxicab
- Current taxicab vehicle regulations are working
- Cameras in taxicabs are important safety equipment
- Emergency flashing lights are important safety equipment

APPENDIX H: EXAMPLE RESEARCH SURVEY QUESTIONNAIRES

Jurisdiction:

City of Portland

Subject:

Wheelchair Accessibility

Survey:

City of Portland Bureau of Transportation needs your feedback on private for hire transportation service requests, especially related to wheelchair accessibility requests. This survey is for private cash/credit cards not for medical accounts or Trimet. Please take this survey each time you requests services from taxicabs, Uber and/or Lyft.

If you need assistance completing this survey, please contact Nickole @ 503-823-9970 If you have a complaint that you'd like to register regarding a ride request, please contact 503-865-2486 or via website at <https://www.portlandoregon.gov/transportation/57927>

1. What day did you make the request?

MM/DD/YYYY

2. Approximately what time did you make your initial request?

hh:mm AM/PM

3. Who did you request a ride from via phone call/phone app/etc? (Check all that apply.)

- Broadway Cab
- Green Cab
- New Rose City Cab
- Portland Taxi Cab
- Radio Cab
- Union Cab
- Sassy's Cab
- Uber
- Lyft
- Other (please specify)

4. Did you try the Uber and/or Lyft app?

- Yes, please answer question #5.
- No, please go to question #6.

5. If you tried the Uber and/or Lyft apps, were vehicles available?

- Yes
- No

6. How long did you wait before your ride showed? (pick one)

- 1-10 minutes
- 11-20 minutes
- 21-30 minutes
- 31-40 minutes
- 41-50 minutes
- 51-60 minutes
- > 60 minutes
- Ride never showed
- I cancelled after too long

7. Did you call multiple times?

- Yes
- No

8. Which company vehicle showed up? (select one)

- Broadway Cab
- Green Cab
- New Rose City Cab
- Portland Taxi Cab
- Radio Cab
- Union Cab
- Sassy's Cab
- Private Vehicle
- Ride Connection
- Other (please specify)

9. Comments?



a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA
sustainability

